REPORT

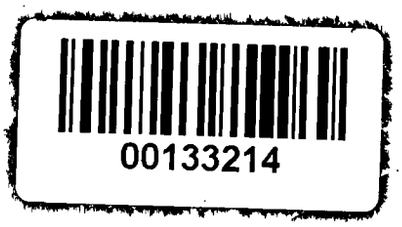
ON THE

FOREST ADMINISTRATION OF THE BOMBAY PRESIDENCY

(INCLUDING SIND)

133214

FOR THE YEAR 1919-20



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List of trees mentioned in the report with their Latin names.

Vernacular name.	Scientific name.
Ain, Matti	*Terminalia tomentosa.*
Anjan	*Hardwickia binata.*
Babul	*Acacia arabic.*
Ber	*Zizyphus jujuba.*
Honne	*Pterocarpus marsupium.*
Kandi	*Prosopis specigera.*
Khair	*Acacia catechu.*
Moho	*Bassia latifolia.*
Poon	*Calophyllum tomentosum.*
Sisoo, Tali	*Dalbergia sisoo.*
Sissum	*Dalbergia latifolia.*
Tarwad	*Cassia auriculata.*
Tiwas	*Ougeinia dalbergiodes.*

REPORT ON THE FOREST ADMINISTRATION OF THE BOMBAY PRESIDENCY, INCLUDING SIND, FOR THE YEAR 1919-20.

CHAPTER I.

CONSTITUTION OF STATE FORESTS.

1.—ALTERATION IN AREA (FORMS NOS. 7, 7-A, 7-B AND 7-C).

The changes among forest areas in the four circles are given in Forms Nos. 7 and 7-A. There was on the whole a total reduction of 24·2 square miles which is attributed to the following causes :—

	Gain (sq. m.)	Loss (sq. m.)
Afforestments and disforestments	2·1	5·6
Accretions and erosions	30·7	53·4
Rectification on resurvey	2·0	....
	34·8	59·0

net loss 24·2 square miles.

There are no important changes in the Northern Circle. 401 acres were added to Reserved forests for casuarina plantations and 23 acres out of Protected forests in charge of the Forest Department and 59 acres out of Revenue pastures were thrown out in favour of cultivation.

In the Central Circle, 4·7 square miles were given out from Revenue pastures for agricultural purposes in the Poona, Satara, Kolaba and Nagar-Sholapur Districts and 114 acres were added to Reserved forests in charge of the Forest Department

The Southern Circle shows a net gain of 255 acres by inclusion of 519 acres in Reserved forests and 294 acres in Protected forests and exclusion of 558 acres from Reserved forests.

The principal changes were in the Sind Circle where 32·7 square miles were gained by accretions and rectification on resurvey and 53·4 square miles were lost by erosions—net loss 20·7 square miles.

The eroded area consisted of

4	square miles	growing valuable timber ;
37	do.	new alluvium without trees ;
9	do.	with young growth ;
3·4	do.	blanks.
53·4		

Of the 70 claims put forward for Kachas adjoining forests including 30 pending from the previous year, 29 were decided in favour of and 2 against the Forest Department and 39 remained undecided at the close of the year.

The areas of forests stood as follows :—

	Area on 1st July 1919 (sq. m.)	Area on 30th June 1920 (sq. m.)
In charge of the Forest Department		
Reserved	12,100·4	12,090·5
Protected	487·4	489·0
In charge of the Revenue Department		
Reserved	1,824·2	1,818·2
Protected	548·9	549·9
Total ..	14,970·9	14,946·7

538 acres of Inam forest in the Dharwar District have been placed in charge of the Divisional Forest Officer, Dharwar-Bijapur, in the Southern Circle for management at the request of the Inamdars.

2.—Forest Settlements (Form No. 8).

These are complete. The minor operations carried out are detailed in Form No. 8. In addition to the 95·1 square miles which remained to be dealt with at the commencement of the year, 5.7 square miles were taken in hand during the year, the total area for settlement being 100·8 square miles. Of this only 4·2 square miles were finally settled leaving an area of 96·6 square miles to be settled at the close of the year. This is principally shared by Sind (78 square miles) and Southern (16 square miles) Circles. The cost of settlements was Rs. 2,755 and this only in the Southern Circle.

The settlements of Peint and Dindori Talukas of the Nasik District in the Northern Circle require revision and this will have to be done along with the revision of the working plans for those areas as soon as an officer is available. The question of acquiring the teak-bearing lands situated within the demarcation limits in Poona and Satara is still under consideration.

3.—Demarcation (Form No. 9).

The total length of boundaries at the end of the year was 41,937 miles, against 41,938 miles at the commencement. Sixty-four miles of natural boundaries which were considered to be not requiring artificial marks were brought under artificial demarcation in the course of the alterations in the areas mentioned in Section 1. Of these, 9 miles occur in the Central Circle, 4 miles in the Southern Circle and 51 miles in Sind. The length of natural boundaries which do not require any artificial marks is now 2,768 miles as against 2,832 in the previous year.

New work was carried out along 24 miles in the Central Circle and 52 miles in the Southern Circle at a cost of Rs. 179 and Rs. 1,230 respectively and 25 miles in Sind free of cost. In the Central Circle it was due to the land handed over by the Tata Company for management, in the Southern Circle to the area handed over from the Ratnagiri District and the clearance of Supa-Goa and Belgaum-Savantwadi frontier lines and Dharwar-Bijapur and Dharwar-Kanara District boundary lines, and in Sind to the area added by accretions. No new work was carried out in the Northern Circle owing to scarcity of labour due to the effect of influenza.

The length of boundaries remaining to be dealt with is 105 miles in the Northern, 11 miles in the Central and 110 miles in the Southern Circles, in all 226 miles. In Sind 72 square miles of Kacha lands (accretions) have to be divided into half mile square compartments by cut rides of 20 feet width. 107 miles of existing compartment lines were cut during the year, of which 70½ miles were cut free of cost and 30½ miles for Rs. 986.

In all 20,433 miles of existing boundaries were repaired during the year.

The expenditure on 'new work' was Rs. 1,409 and on 'repairs' Rs. 3,428, in all Rs. 4,837 against Rs. 5,887 in the previous year.

4.—Forest Surveys (Form No. 10).

No survey operations were carried out during the year. The area remaining to be surveyed is 276 square miles in the Southern Circle and the whole of the forest area (1,134 square miles) in Sind.

The total expenditure on Constitution of State Forests during the two years was as follows:—

Circle.	1919-20.	1918-19.	Difference.
Northern	2,399	2,063	+ 336
Central	1,697	2,501	— 804
Southern	5,952	2,246	+ 3,706
Sind	....	....	..
Total ..	10,048	6,810	+ 3,238

The increase is shared by the Northern and Southern Circles under 'Compensation for lands.'

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

1.—Regulation and Management.

(a) Preparation and Control of Regular Working Plans.

Preparation (Form No. 11).—The preparation of new plans and revision of existing working plans are greatly handicapped on account of continued shortage of staff. New areas to be brought under working plans amount to 2,640 square miles and revisions are required for 4,845 square miles out of the 7,841 square miles which are under sanctioned working plans. New plans for 1,360 square miles of the former and revisions for 2,850 square miles of the latter are in hand.

Northern Circle.—The revised Thana working plan which was delayed owing to a number of changes in the circle charge is now nearing completion and will be submitted to Government as soon as possible. The forests meanwhile are being worked according to the revised prescriptions. No new work was undertaken in the circle.

Central Circle.—The revised plan for the Satpuda forests was printed and submitted to Government after the close of the year. Work is proceeding according to the revised plan in anticipation of Government sanction. The revised plan for the Poona forests is still awaited from Mr. Thomson. The plans for the casuarina areas and the Matheran Plateau forests in Kolaba were revised during the year.

Sixteen square miles of forests were added to the area of the Mahableshwar Plateau working plan for supplying the growing demand for fuel.

Southern Circle.—An extension of the Gokak working plan was sanctioned during the year.

The following working plans are under preparation :—

(1) Working plan of the Honavar and Bhatkal fuel areas (S. D. Kanara).
(2) Do. for the regeneration of Gund forests (W. D. Kanara).
(3) Do. for the Bijapur forests.

Revision of the first three of the following plans was completed and of No. 4 has been taken in hand :—

(1) Working plan for Block VII-A (N. D. Kanara).
(2) Do. of the Yellapur and Mundgod High forest plans (E. D. Kanara).
(3) Do. of the Khanapur fuel forests.
(4) Do. of the Karwar casuarina areas (W. D. Kanara).

A complete revision of all the High Forest working plans in the Kanara Divisions, more especially of the older ones for the Supa and Haliyal forests, is a very urgent necessity and the want of a whole time Working Plan Officer is keenly felt.

Sind.—Some modifications of the Upper Sind revised working plan are under consideration. The Deputy Conservator hopes to be able to submit them shortly.

Control (Form No. 11a).—The prescriptions of the working plans were carried out as far as the supply of labour permitted. In the Northern Circle owing to scarcity of labour and high prices of fodder and food stuffs, several coupe contractors in Thana had to be given extensions and the two years' arrears in the North Dangs fellings remained uncleared. In the Southern Circle for the same reason timber contractors could hardly cope with their work at the original contract rates and these had to be raised in several cases. The Karwar fuel coupes for the year were not exploited as there was a large stock on hand of fuel cut for the Munitions to be disposed of.

In the Central Circle, however, all the areas of the preceding year were cleared off and the work was brought up to date.

(b) Preliminary Working Plans.

There were none for the reasons explained in section *(a)*.

(*c*) *Plans of Operations.*

These were prepared, submitted and worked up to as far as labour supply permitted.

2.—Communications and Buildings (Form No. 12).

(*a*) *Roads and Bridges.*

With this head are concerned only the three Presidency circles. Sind affords water-transport facilities and these are generally availed of.

181 miles of new roads were constructed and 990 miles repaired at a cost of Rs. 4,33,849. In 1918-19 the expenditure was Rs. 5,50,673.

The new work compares with that of the previous year as follows :—

Circle.	1919-20.		1918-19.	
	Length.	Cost.	Length.	Cost.
	Miles.	Rs.	Miles.	Rs.
Northern	47	26,063	52	38,134
Central	23	9,660	21	4,291
Southern	111	2,28,590	111	3,44,175
Total ..	181	2,64,313	184	3,86,600

The repairs cost Rs. 1,69,536 against Rs. 1,64,073 of the previous year.

Of the new roads undertaken in the Northern Circle, the one from Navapur to Subir to provide better means of export for North Dangs timber is one of the most important. For development of the South Dangs the extension of the Bilimora-Kalamba Railway to Jharia and thence up the Khapri valley with branches for the Purna and Ambika valley and the improvement of the internal timber routes down the valleys to feed the proposed railway are essential and these matters are under consideration. The development of communications in Peint is also receiving earnest attention. A survey will be made for extension of the Harsul-Goldari road through Dharampur and Daman territory to join the Sanjan road near Udhwa.

In the Central Circle, the lines to join the extensive forest reserves in the East and West Khandesh Districts with the main roads were surveyed and pegged out with the help of the Public Works Department and the estimates of cost are awaited from that Department. The construction will be undertaken in the year 1921-22.

There is much to be done in the way of survey and alignment of roads in the Satpudas. An Engineer is required for the work.

In the Southern Circle, the extension of the Alnavar-Dandeli railway to Kirwatti was surveyed. The existing railway removed only 3,074 tons of timber during the year. Owing to the high rate of freight (Rs. 5 per ton for 19 miles) very little timber and scarcely any fuel or bamboos were removed. Since the rate has been now reduced to Rs. 1-8-0 per ton it will facilitate the removal of large quantities of jungle-wood, fuel and bamboos.

Since the appointment of the Forest Engineer in this Circle the work of road-making has greatly expanded and the quality of work also has improved. In all the five Kanara divisions and Belgaum new work was carried out to the extent of 111 miles at a total cost of Rs. 2,28,590. At this rate in a few years time, a net work of roads in the more important forests of Kanara and the adjoining tracts may be expected.

(*b*) *Buildings.*

The expenditure in all the circles was Rs. 1,69,959 on new work and Rs. 52,493 on repairs. The figures of the previous year were Rs. 1,32,881 and Rs. 42,229, respectively. The total new expenditure during the three years was :—

	Rs.
1919 20	1,69,959
1918-19	1,32,881
1917-18	52,233

The building schemes are being gradually carried out as funds become available more particularly in respect of subordinates' houses. These are badly required in the Northern and Central Circles. The works are much hampered by lack of labour both skilled and unskilled with the result that most of them are generally not completed within the year to which they relate.

(c) *Miscellaneous Works.*

The new works carried out were:—

Northern Circle.

	Rs.
10 wells, of which 3 were started and 7 were completed—Cost	2,634

Central Circle.

8 wells, of which 3 commenced in the previous year were completed and 5 were begun—Cost	1,604

Southern Circle.

(1) 3 wells were completed;

(2) Telephone lines were erected between the headquarter stations of five ranges in Karara, N. D.;

(3) A timber storing shed at Hattikeri in Kanara, C. D., was half constructed;

(4) Installation of water-supply at Dandeli in Kanara, N. D., was begun—aggregate cost	7,874

Sind.

(1) A cut in the bank of the Rajib Canal to irrigate the Lakhi forest in the Shikarpur Division;

(2) Embankment on the Paban Karia and a dam in the Kasim kario Kasimsha forest in the Larkana Division—Cost	540

Total new expenditure Rs. 12,652 against Rs. 13,121 of the preceding year.

The expenditure on repairs was Rs. 9,892 while it was Rs. 10,149 in the previous year.

3.—Protection of Forests.

(a) *General Protection (Form No. 13).*

The total number of forest offences during the year declined from 22,812 to 19,303, a decrease of 3,509 cases. This is shared by all circles. Northern 787, Central 1,499, Southern 300 and Sind 923. As compared with the average the decrease in the total of the year under report is 2,829.

The total of 19,303 consists of the following:—

I.	Injury by fire	2,271	or	11·8 per cent.
II.	Unauthorized fellings	8,277	„	42·9 „ „
III.	Unauthorized grazing	7,512	„	38·9 „ „
IV.	Other offences	1,243	„	6·4 „ „

The following table compares the new cases of the year with those of the previous year and the average of preceding three years by circles :—

Circle.	A Cases taken into court.				B Cases compounded.				C Cases undetected.				Total.				Grand Total.		
	Injury to forest by fire.	Unauthorized fellings.	Unauthorized grazing.	Other offences.	Injury to forest by fire.	Unauthorized fellings.	Unauthorized grazing.	Other offences.	Injury to forest by fire.	Unauthorized fellings.	Unauthorized grazing.	Other offences.	Injury to forest by fire.	Unauthorized fellings.	Unauthorized grazing.	Other offences.	1919-20.	1918-19.	Average of past three years.
Northern	42	76	61	13	70	1,557	2,197	309	415	362	7	10	527	1,995	2,265	332	5,119	5,906	5,987
Central	52	148	198	35	127	2,188	2,181	678	450	445	15	7	629	2,781	2,394	720	6,524	8,023	6,773
Southern	6	40	34	4	48	1,642	1,375	145	960	279	28	12	1,014	1,961	1,437	161	4,573	4,873	5,431
Sind	1	56	23	10	4	1,299	1,392	20	96	185	1	..	101	1,540	1,416	30	3,087	4,010	3,941
Total, 1919-20	101	320	316	62	249	6,686	7,145	1,152	1,921	1,271	51	29	2,271	8,277	7,512	1,243	19,303	..	..
	799				15,232				3,272										
Total, 1918-19	117	401	197	50	210	8,063	8,697	1,328	1,963	1,700	55	31	2,290	10,164	8,949	1,409	..	22,812	..
	765				18,298				3,749										
Average of past three years ..	82	458	260	92	211	7,415	8,617	1,083	1,590	2,199	44	31	1,883	10,122	8,921	1,206	..	..	22,132
	892				17,376				3,864										

I. *Injury by fire.*—The number of offences under this head was 2,271 against 2,290 in the preceding year—a decrease of 19 cases. There was a falling off of 133 and 150 cases in the Southern and Sind Circles and an increase of 142 and 269 in the Northern and Central Circles. The reasons are explained later on in sub-section (*b*).

II. *Unauthorized fellings.*—These show a decrease of 1,887 cases as compared with the figures of 1918-19; in the Northern Circle (661), Central (800) and Sind (468), while in the Southern Circle they rose by 43. There was less resort to forests as owing to favourable rain and good crops the people were busy in their fields.

III. *Unauthorized grazing.*—Also decreased by 1,437 cases as compared with the figures of 1918-19. The decrease by circles is—Northern 284, Central 752, Southern 100 and Sind 301. There was abundant fodder outside forests.

IV. *Other offences.*—These dropped from 1,409 to 1,243—a reduction of 166 cases

The total cases taken to court were 1,203, including the 404 pending from the previous year. Of these, 887 were disposed of during the year, 813 resulting in conviction and 74 in acquittal. These compare by circles as follows :—

Circle.	1919-20.		1918-19.		Percentage of acquittals.	
	Convictions.	Acquittals.	Convictions.	Acquittals.	1919-20.	1918-19.
Northern	196	8	138	9	4·0	6·1
Central	469	41	312	30	8·5	8·7
Southern	104	17	61	21	16·3	25·8
Sind	44	8	64	18	18·1	21·9
Total	813	74	575	78	9·1	11·9

The percentages of acquittals for all circles show decreases. Nevertheless there is still room for improvement in the Southern and Sind Circles.

Compounded new cases of the year decreased from 18,298 to 15,232, *i.e.*, by 3,066. Of the total compounded cases 18,360, including the 3,128 pending from the previous year, 16,000 were disposed of during the year. Compensation amounting to Rs. 88,019 was recovered in 15,017 and offenders were let off with warning in 983. The average compensation realized per case was :—

	1919-20.	1918-19.
Northern Circle	6·1	5·5
Central Circle	5·3	6·3
Southern Circle	6·4	5·2
Sind	5·9	4·4
Total Presidency ..	5·9	5·6

Undetected offences also dropped from 3,749 to 3,272. The decrease of 477 occurs under all classes of offences—42 under 'fire', 429 under 'fellings', 4 under 'grazing' and 2 under 'other offences'.

(*b*) *Protection from fire* (*Form No. 14, 15 and 15-A*).

A total area of 11,195 square miles was attempted to be protected during the year. Of this 10,628 square miles were successfully protected, *i.e.*, 94·9 per cent. as against 92·9 in 1918-19. According to circles there is an increase of 9 per cent. and 1·1 per cent. in the Southern and Sind Circles and a decrease of 1·1 per cent. and 4·1 per cent. in the Northern and Central Circles.

The cost of protection works out to Rs. 5·9 per square mile successfully protected as against Rs. 4·9 in 1918-19.

The results by circles during the two years are as follows :—

Circle.	Year.	Area attempted to be protected.	Failures.	Area actually protected.	Percentage of area successfully protected.	Cost.	Cost per sq. m. protected.
		sq. m.	sq. m.	sq. m.		Rs.	
Northern	1919–20	3,258	91	3,167	97·2	22,341	7·0
	1918–19	3,258	56	3,202	98·3	18,196	5·7
Central	1919–20	2,679	200	2,479	92·5	14,976	6·0
	1918–19	2,734	91	2,643	96·6	11,221	4·2
Southern	1919–20	4,119	272	3,847	93·4	22,658	5·9
	1918–19	4,107	640	3,467	84·4	20,947	6·0
Sind	1919–20	1,139	4	1,135	99·6	2,368	2·0
	1918–19	1,156	17	1,139	98·5	1,254	1·1
Total	1919–20	11,195	567	10,628	94·9	62,343	5·9
	1918–19	11,255	804	10,451	92·9	51,618	4·9

In the Northern Circle, the Panch Mahals, West Thana and the three Nasik Divisions are responsible for the increase in area burnt. The reasons attributed are in the Panch Mahals and Thana to the good crop of grass which remained unused and in Nasik to intentional firing to improve the quality of the grass. Steps are being taken by the Conservator to prevent such firing.

The rise in the area burnt in the Central Circle is noticeable in the North and West Khandesh and Poona Divisions and is attributed to the exceptionally good crop of grass which was not used by the people as there was plenty of fodder in the plains. In such circumstances great precautions are necessary on the part of the staff and the people. Where these were found wanting, due steps were taken as regards the conduct of both.

The improvement in fire-protection in the Southern Circle was chiefly due to the late rains in November and early rains in April. Nevertheless the number of fires that have occurred within the very short fire season reflects on the attitude of the people. The principle of resorting more to rewarding for good protection than punishing for bad protection is being acted on as far as possible.

In Sind the degree of good protection is mainly dependent on the extent of inundation of the Indus.

Form No. 15 gives the number and origin of fires that occurred during the year. The comparison for the two years is as follows :—

Origin of fire.	No. of fires.		Area burnt acres.	
	1919-20.	1918-19.	1919-20.	1918-19.
A. Burning of fire lines.	50	46	7,297	14,559
B. Crossing exterior lines.	250	232	26,825	73,328
C. Accidents (persons in forest).	425	402	54,202	54,345
D. Intentional (persons in forest).	253	400	24,391	49 527
E. Railway engines.	31	52	1,976	8,931
F. Lightening	3	....	195	....
G. Causes unknown.	1,262	1,172	254,775	313,437
Total.	2,280	2,304	369,661	514,127

There were decreases, both in the number of fires and the acreage burnt, under each class of fire in all circles due to the favourable season. As usual in nearly half the number of cases the origin or cause of the fire is unknown.

The statement of areas continuously immune from fire for a period of seven years prescribed in Government Resolution, Revenue Department, No. 248, dated 12th January 1904, is given in Form No. 15-A. Details are not available in respect of the West Nasik, three Khandesh and Satara Divisions.

The system of rewarding or punishing villagers communally for good or bad protection was continued in the Southern Circle. 422 villages were rewarded with free grazing and grazing at concession rates for good protection and 321 villages punished by enhancement of grazing fees as against 504 and 430 respectively in 1918-19.

(c) *Protection from Caltte (Form No. 16).*

The forest areas open and closed to grazing were as follows :—

	Sq. m.	Per cent.
Closed to all animals for the whole year	2,631	17·7
Closed to all animals for part of the year	201	1·4
Open to all animals except browsers for whole year	8,288	55·5
Open to all animals except browsers for part of the year	331	2·3
Open to all animals for the whole year	3,496	23·1
Total ..	14,947	

The area closed for the whole or part of the year was 19·1 per cent. of the total forest area. So the area which was open to grazing of animals amounted to 80·9 per cent. In 57·8 per cent. of the latter, however, sheep, goats and camels were not admitted to graze.

The number of cattle which grazed during the year compares with 1918-19 as follows :—

Circle.	Horned cattle.		Sheep & goats.		Camels.		Other animals.		Total.	
	1919–20.	1918–19.	1919–20.	1918–19.	1919–20.	1918–19.	1919–20.	1918–19.	1919–20.	1918–19.
Northern ..	701,688	793,438	96,088	192,287	..	..	1,612	1,638	799,388	987,363
Central ..	677,105	962,721	84,500	86,288	..	..	6,539	4,720	768,144	1053,729
Southern ..	459,115	463,853	31,613	7,603	..	..	1,171	1,135	491,899	472,591
Sind ..	45,571	68,996	72,230	82,577	2,268	3,777	7,109	5,120	127,178	160,470
Total ..	1,883,479	2,289,008	284,431	368,755	2,268	3,777	16,431	12,613	2,186,609	2,674,153

There is a decrease of 487,544 compared to the previous year, due solely to mortality on account of famine in the previous year. The Southern Circle, however shows an increase in the number of sheep and goats owing to the transfer of certain grazing areas in the Belgaum and Dharwar-Bijapur Divisions from the Revenue to this Department.

The grazing fee collection amounted to Rs. 2,89,676 against Rs. 3,49,957 in the previous year, a decrease of Rs. 60,281. Compared with existing full rates the value of grazing, free or at privileged rates, amounted to Rs. 15,76,055.

In Sind the grazing fee rates of Rs. 1-8-0 and 0-2-0 for camels and goats were, under Government sanction, raised to Rs. 3-0-0 and 0-4-0 respectively in view of the heavy damage done to forests by these animals.

The following table prescribed in Government Resolution No. 4081, dated 22nd April 1908 gives the details of cattle impounded during the two years :—

Circle.	Horned cattle.				Sheep & goats.			
	Open.		Closed.		Open.		Closed.	
	1919-20.	1918-19.	1919-20.	1918-19.	1919-20.	1918-19.	1919-20.	1918-19.
Northern	2,844	4,224	31,530	39,272	8,536	12,258	2,939	3,865
Central	4,126	667	27,977	53,709	7,422	7,556	5,002	6,459
Southern	1,556	946	12,416	11,653	6,803	65	829	5,712
Sind	1,540	1,753	6,222	7,820	1,535	3,214	5,267	8,112
Total ..	10,066	7,590	78,145	1,12,454	24,296	23,093	14,037	24,148
Average of past 3 years	6,574		89,696		31,392		15,678	

Circle.	Other animals.				Total.				Grand Total.	
	Open.		Closed.		Open.		Closed.			
	1919-20.	1918-19.	1919-20.	1918-19.	1919-20.	1918-19.	1919-20.	1918-19.	1919-20.	1918-19.
Northern ..	35	20	119	206	11,415	16,502	34,588	43,343	46,003	59,845
Central ..	25	45	142	487	11,573	8,268	33,121	60,655	44,694	68,923
Southern ..	..	..	24	29	8,359	1,011	13,269	17,394	21,628	18,405
Sind	192	501	2,019	2,677	3,267	5,468	13,508	18,609	16,775	24,077
Total ..	252	566	2,304	3,399	34,614	31,249	94,486	1,40,001	1,29,100	1,71,250
Average of past 3 years.	777		2,543		38,743		1,07,917		1,46,660	

The total number of impoundings was 42,150 less than in 1918-19 and 17,560 less than the average. The main reason for the decrease is cattle mortality on account of the scarcity in the previous year.

Impoundings from open forests increased by 3,305 in the Central Circle and by 3,365 in the Sind Circle due to cattle grazing without the owners having paid the fees. Attention of the Conservators has been drawn to the orders contained in Government Resolution No. 2555, dated 12th April 1899, according to which impounding from open areas should be avoided and the fees due should be collected in the usual way. The decrease in the impoundings from closed forests is shared by all Circles and is due to a good crop of grass outside such areas having afforded ample grazing.

In Sind newly exploited coupes were fenced with waste branch wood. 300 miles of new fences were put up and 506 miles of existing ones repaired by subordinates assisted by maldars and privilege holders.

(d) Protection against injuries from natural causes.

Northern Circle.—Creeper cutting was carried out systematically in the North and South Dangs, the three Thana Divisions and the Panch Mahals according to working plan prescriptions.

Central Circle.—In Kolaba contractors cleared climbers and prickly pear from coupes under exploitation and the rayats cleared and used lantana for *rab* in the casuarina areas. In the Poona Division prickly pear was removed from certain Babul areas partly by the staff and partly by paid labour.

Southern Circle.—Besides the usual creeper cutting by subordinates no work was done. The eradication of lantana undertaken as a famine relief work during the previous year was discontinued for want of funds. An area of 11 acres was eroded from the casuarina plantation at Karwar.

Sind.—Climber cutting was carried out by contractors in the annual coupes and by subordinates in the regenerated areas as usual. In Larkana the injuries caused to the growing stock in inland forests by drought last year were repaired to a certain extent by the use of the surplus water from private *karias* and by working the forest sluices at their full capacity when water was not required for agricultural purposes.

4. Sylviculture.

(*a*) *Natural Reproduction.*

1. *From seed.*—Owing to favourable rains reproduction from seed has been generally satisfactory although owing to the drought in the previous year there was a shortage of seed for collection.

In the Northern Circle the operation of finding out and tending self-grown seedlings was carried out in the three Thana, Surat and Panch Mahals Divisions with the following results :—

Number of natural seedlings tended by mulching, etc.	Number found alive at end of May.	Percentage.
226,984	81,890	36

In Sind the high and prolonged innundation and the rains helped regeneration to a great extent. But in Upper Sind this was largely destroyed by severe frost in February.

2. *By Coppice.*—Coppice reproduction is reported to have been satisfactory in all circles. In Thana (Northern Circle) teak shoots are reported to have attained a height of from 12 to 15 feet in one season. The experiment of coppicing Anjan from 6″ to 18″ above the ground level in the Central Circle was continued and the results are being carefully watched.

(*b*) *Tending operations in natural crops.*

In the three Thana Divisions 15 year old coupes were thinned at a cost of Rs. 15,924 and the resulting material was sold for Rs. 25,053. In the Khandesh and Poona Divisions badly shaped trees left standing in coupes exploited by contractors and inferior species likely to suppress more valuable ones were cut and removed and seedlings were mulched and tended in most of the divisions.

The result of the latter operations in Kolaba is very encouraging while in the Deccan Divisions owing to the long drought it is less so. In Sind cleaning in the dense advance growth of babul for the betterment of crop was done in 15 acres of sisoo plantation in Shikarpur, in 60 acres in Larkana, and in patches of babul saplings 4 to 6 years old in Karachi. Also thinning operations were carried out in almost all the divisions.

(*c*) *Artificial Reproduction* (*Form No. 18*).

(*i*) Regular Plantations.

With reference to the remarks of the Government of India on last year's report, enquiry was made as regards the areas which could rightly be designated as Regular Plantations and it was found that the areas hitherto reported in all circles were incorrect. The same as now ascertained are shown in Form No. 18.

The only regular plantations in the Northern and Central Circles are of casuarina. In North Thana such plantations consist of 140 acres including the

25 acres newly planted up at a cost of Rs. 9,556. Compared with similar plantations in Western Division, Kanara, the expenditure is excessive. Enquiry is being made into the details. The casuarina plantations in Kolaba comprise 114 acres including the one acre newly planted up during the year. In the Southern Circle 46 acres of felled area and 9 acres of new land were planted up with casuarina during the year. In Sind the plantations now comprise 469 acres and consist of *Dalbergia sissoo*. Their present condition owing to unsuitable location and past neglect is very poor and steps have been taken to secure more satisfactory management of plantation operations in future and to cut down unprofitable expenditure.

(*ii*) Cultural Operations.

Northern Circle.—In the three Thana Divisions these operations have to be intensively carried out in exploited coupes under the revised working plan. As natural seedlings can scarcely be depended on sowing and planting are resorted to systematically. Sowing work consists of preparing patches distributed as evenly as possible over the coupe, burning spray wood on them from the cuttings and dibbling seed. To supplement failures in sowing operations plants from nurseries or gurcharans and other forest areas are transplanted. The subordinates being new to this kind of work the results are not quite satisfactory. It is proposed to have a course of practical training for guards and foresters in the coming season. The sowing and planting done in Thana was as follows :—

No. of patches prepared and dibbled with seed.	No. of germinations.	Survivals in May 1920.	Percentage.	Transplants put out.	Survivals in May 1920.	Percentage.
236,946	675,559	306,169	46	545,651	193,196	35

Including sowing and planting and tending of natural seedlings, 1,371,819 plants were dealt with in the Thana forests of which 561,714, or roughly 40 per cent. are reported to have survived their first dry season. The number of acreas clear felled being 7,362 acres the above give an average of 76 plants per acre surviving.

Cleanings and weedings were carried out in one and two year-old coupes.

In the Surat Division, in exploited areas and blanks in the Dangs 10,940 teak plants were put out of which 6,000 or 55 per cent. are reported to have survived the hot weather. An area of 1,200 acres in Block IV-10 of North Dangs was systematically treated.

In the Panch Mahals, coppice and seedlings in three year coupes were tended by cutting thorny shrubs and creepers. Dibbling of teak was done in 62,145 patches, but as it was too late no seedlings appeared by end of June.

In the three Peint ranges of West Nasik some useful work was done in sowing and planting up blanks and open areas in cut coupes. In East Nasik 73 acres of cut babul forest were ploughed and sown up with babul seed. Seed of teak, moho, ain, khair and other species was dibbled in the cut coupes chiefly by the forest guards in the three Nasik Divisions.

Central Circle.—The special work done was as follows. Planting on mounds was continued on a small scale with satisfactory results and a few small plantations combined with the growing of agricultural crops were made in the Poona Division. Tarwad (*Cassia auriculata*) was sown in all Divisions except Kolaba with excellent results. The seed sown last year which did not germinate owing to drought germinated this year.

Southern Circle.—The following operations are reported :—

Kanara, N. D.—In the teak pole area 10½ lakhs of teak plants were planted or tended in 28 coupes, and did well.

In the High forest an area of 60 acres was clear cut and burnt and planted in 1919 with teak which have done well. Further areas of 222 acres were cleared and burnt and sown in 1920 with poor results in most cases. In

about half of this area rogi has been sown with the teak. It wss hoped that people would be found willing to grow ragi for themselves and tend the teak plants free of oharge or even on payment but this has not turned out to be the case. The cultivation has had to be done departmentally.

Kanara, E. D.—Sowing and planting of teak and tending of natural seedlings was carried out in 28 pole coupes with good results. On the 30 acres cleared and sown with teak in the High Forest area near Ganeshgudi in 1919 teak has established itself well. This teak was grown with ragi which latter grew well but owing to scarcity of labour could not be reaped at the proper time and this led to loss.

Further areas of 87 acres in the same Block (XVII) were cleared and sown with teak in 1920. The seed did not germinate well and much planting of blanks has had to be done. In the same neighbourhood patches of flowering *Strobilanthes* were cut back so as to prevent seedling and the area sown up with teak.

In the whole Division 7 lakhs of teak seedlings were planted, 5 lakhs of natural seedlings tended and 700 bags of teak seed sown.

Kanara, C. D.—95 acres were clear cut and burnt and sown up with teak and other good species. About half of the area was also sown with ragi. Up to now the results are fair. Germination of teak seed was not good and much planting up of blanks had to be done.

Kanara, S. D.—In 1919, 105 acres were cleared departmentally and sown with teak which has grown very well indeed. In 1920 further areas of 255 acres were cleared and sown with good results. In addition to the above, 187 acres in all were given out in 1919 to Kumri Marathas in 15 villages for clearing on condition that teak should be sown and tended along with the ragi crops. In only one case were the results good as the Marathas were on the whole very indifferent and disinclined to look after the teak plants.

In 1920 further areas of 265 acres were given out on similar conditions in 11 villages and an area of 100 acres was given out in one village for sowing with Tali Palm seed along with ragi. Some of the areas which failed in 1919 were given out again in 1920 for a further trial. Results are more promising this year than last and it is hoped that this system will be further developed in Kanara Southern Division where there is a large resident population of people accustomed to kumri.

Kanara, W. D.—20 acres were cleared at Sulgeri and 80 acres in Gund and sown with teak and ragi. Blanks in previous year's plantations were filled up. Results are reported to be satisfactory. Much seed sown in 1919 has germinated in the rains of 1920.

Belgaum.—At Nagargali 25 acres were sown up in 1920 with teak and other species but the seed did not germinate. On other areas, 158,000 seedlings were planted and 43,000 natural seedlings tended. Large quantities of seed were sown but germination was poor on the whole. The sowing of Tarwad was continued in suitable areas.

238 acres of land covered with lantana were leased out to be kumried and sown up with the seed along with field crop seeds. These leases are to run for two years each and this system may prove the most effectual one to cope with the eradication of lantana.

Dharwar-Bijapur.—32,000 seedlings were planted out with fair success. Regeneration of six babul coupes was carried out in combination with the growth of field crops. Tarwad sowing was carried out with fair success.

Sind Circle.—In the five divisions hgh level lands aggregating 1,662 acres were treated on the agriculture-cum-foriestry system and an assessment of Rs. 4,892 was recovered. The results were not satisfactory owing to the severity of frost. 15,179 acres of exploited coupes, kachas and blanks were broad-casted with 12,372 maunds of babul, kandi, ber and tali seeds. Although satisfactory germination was secured in the first instance yet severe late frosts killed all kinds of young crops.

5. Exploitation.

(a) *System of Management.*

(i) Major Forest Produce.

The different methods of sylvicultural treatment in vogue are :—

Clear fellings.—In the Northern Circle these fellings comprise the babul coupes in the East Nasik Division. Clear fellings under the uniform method were carried out in the Thana forests.

In the Central Circle clear fellings were undertaken in the babul areas of East Khandesh and Poona Divisions and in the scrub jungle and pasture forest of the former, the total area exploited being 501 acres.

In the Southern Circle clear fellings were made in 88 acres of casuarina plantations in Kanara, in 1,149 acres of the areas selected for regeneration in Kanara and Belgaum and in 97 acres of babul forests in Bijapur.

In Sind 15,998 acres of babul forests were exploited with reservation in groups.

Coppice with standards.—The forests worked under this system are those of Mandvi, Bulsar-Chickhli, Halol, Nasik above-ghat and Igatpuri in the Northern Circle, and Poona, Satara and Kolaba in the Central Circle. In the Southern Circle all the fuel and teak pole forests are worked under this method and the total area dealt with during the year was 15,774 acres.

Selection fellings.—These were carried out in Peint and Dindori in the Northern Circle and in the Teak High Forests of Kanara in the Southern Circle. In the latter 11,558 trees in all were brought out during the year.

Improvement fellings.—These were carried out in the Anjan forests of North Nasik, in the North and South Dangs High Forests, in the evergreen forests of the Poona Division and in the forests of the three Khandesh Divisions; also in the Teak High Forests of Kanara where in all 14,915 trees were extracted. In Sind 72 overmature trees were removed from the Sissoo plantation in Sukkur.

Unregulated fellings.—In all circles such fellings are usually undertaken for providing timber for free grants and deparmental works, and for removal of dead and fallen trees. Also reserved trees in occupied lands and waste lands outside forest limits are extracted by this method. In Sind the erosion fellings come under this head.

In the Southern Circle dead sandalwood trees were exploited in all divisions except Kanara, N. D., and brought in a revenue of Rs. 57,120; in Kanara, E. D., the clearing of grazing grounds was proceeded with and yielded 6,810 timber trees, 272 poon and 182 white cedar logs were worked out in Kanara, C. D., and 7,264 cubit feet of dead and fallen wood was removed from babul forests in Bijapur. In Sind 3,215 acres of erosion strips were cleared and realized Rs. 35,016.

(ii) Minor Forest Produce.

As usual the methods followed in extracting minor forest produce were (1) on permits for local consumption as in the case of bamboos, grass, earth, stones, stakes, thorns, leaves, etc., (2) farming out the right of collection for trade as in the case of fruits, pods, barks, nuts, flowers, etc., and (3) departmental collection for sale at depots as in the case of *hirda* (*Terminalia chebula*), mhowra (*Bassia latifolia*), Rosha oil, etc. The total revenue realized from minor produce and the value of such produce utilized by free grants and right-holders during the five years were :—

	1919-20.	1918-19.	1917-18.	1916-17.	1915-16.
Revenue realized ..	9,61,415	10,53,421	9,10,973	8,02,835	8,17,995
Value ..	4,61,711	5,94,288	4,46,957	4,57,644	4,06,811
Total ..	14,23,126	16,47,709	13,57,930	12,60,479	12,24,806

There is a steady rise in the revenue although most of the products are scarcely fully worked out. The marked increase in 1918-19 was due to abnormal prices realized for tannin products such as tarwad and hirda and for mhowra, etc.

(b) *Agency of Exploitation.*

(i) Departmental Agency.

A comparison of the outturn of major and minor produce extracted departmentally during the two years is given in the following table :—

Circle.	Year.	Major Produce.				Minor Produce.			
		Timber in thousands.	Fuel in thousands.	Total in thousands.	Sandal wood.	Bamboos.	Grass.	Other.	Total.
		C. ft.	C. ft.	C. ft.	Rs.	Rs.	Rs.	Rs.	Rs.
Northern ..	1919–20	219	313	532	..	1,794	33,591	3,088	38,473
	1918–19	317	340	657	..	17,042	404	..	17,446
Central ..	1919–20	10	450	460	2,407	19	..	14,257	14,267
	1918–19	21	276	297	..	..	..	10,796	10,796
Southern ..	1919–20	1,490	4,394	5,884	57,120	23,111	..	638	23,749
	1918–19	1,702	5,838	7,540	62,163	69,047	..	2,789	71,836
Sind ..	1919–20	18	1,616	1,634	..	..	..	2,223	2,223
	1918-19	47	989	1,036	..	..	..	1,518	1,518
Total ..	1919–20	1,737	6,773	8,510	59,527	24,924	33,591	20,206	78,721
	1918–19	2,087	7,443	9,530	62,163	86,089	404	15,103	1,01,596
Difference ..	....	—350	—829	—1,179	—2,636	—61,165	+33,187	+5,103	—22,875

The total outturn of major produce other than sandalwood was less by 1,179,000 cubic feet owing chiefly to the discontinuance of the supply of timber and fuel for munitions. For the same reason there was a decrease of Rs. 61,165 under bamboos. The price of sandalwood dropped from Rs. 469 to Rs. 424 per khandi (560 lbs.) and there was a corresponding fall of Rs. 2,636 in sandalwood receipts. The increase of Rs. 33,187 under grass is ascribed to departmental collection in East Thana as a commercial experiment.

In the Northern Circle main fellings were carried out in the North Dangs and 43,469 cubic feet of timber was brought to the depot. The material not suitable for logs was sawn at the Subir mill and gave an outturn of 26,037 cubic feet of sawn material the estimated value of which was Rs. 58,858.

The working of the Government sawmill at Subir during the year was as follows :—

Value of work done.		Working expenses.	
	Rs.		Rs. a. p.
5,202 N. G. sleepers (5,690 c. ft.) at as. 3 per c. ft.	1,067	Oil	383 4 2
		Stores from England	1,894 4 0
		Local stores	2,806 7 6
11,547 c. ft. scantlings, at as. 5 per c. ft. ..	3,608	Establishment, including coolies ..	7,808 11 5
		Miscellaneous	1,154 0 0
8,800 c. ft. boards, battens at as. 9 per c. ft.	4,950	Depreciation of machinery at 10 per cent.	3,500 0 0
Total ..	9,625	Total ..	17,546 11 1

Reducing the outturn of work to narrow gauge sleepers the outturn—about 46,935 sleepers=51,335 c. ft. This gives an average cost per c. ft. of just under 5½ annas which appears high, but then no handsawing of sleepers could be done in the Dangs as low as annas 3 per c. ft.

The credit of the mill will then be as follows :—

	Rs.
Full value of half the number of sleepers 2,601 at Rs. 2-4-0	5,852
Value of work done on the remaining half including cost of collecting pieces at Re. 1	2,601
Full value of material from waste, *i.e.*, 20,347 c. ft. at Rs. 2-8-0 ..	50,867
	59,320
Against this, total expenditure including collection of material ..	21,826
Profit ..	37,494

The working of the Waghai sawmill is properly shown also under departmental agency since although the mill is run by a contractor the produce is sold departmentally and paid for by half share of the proceeds. The outturn was 15,589 c. ft. of sawn material compared with 16,958 last year. The sales of produce from this mill are shown below :—

Material.	Quantity.	Price realized.	Rate per c. ft.	Remarks.
			Rs. a. p.	
Battens ..	2,318	5,760	2 7 9	
Boards ..	3,608	12,353	3. 6 8	
Scantlings ..	6,156	12,466	2 6 6	Sawn during the year.
Scantlings supplied to West Khandesh ..	3,507	12,625	3 9 7	For grass storage sheds.
Half round sleepers ..	3,088	2,900	0 15 3	Sawn in 1917-18.

This contractor is supposed to exploit the waste wood left over from the standing coupes in the Waghai Round and to suit him material yielding logs less than $6\frac{1}{4}$ c. ft. is not allowed to be removed by coupe contractors. In spite of this help and being given a special felling in Central Dangs he is reported to be working unsatisfactorily and to be leaving much useful material to waste in the forest. His 4-year contract expires next year and it is not intended to renew it.

Thinnings were carried out in the 15-year old coupe under the revised working plan for Thana with the following result :—

No. of coupes thinned.	Expenditure incurred.	Revenue realized.
	Rs.	Rs.
314	15,925	25,053

Material of an estimated value of Rs. 3,525 remains to be sold in North Thana.

Teak was felled departmentally for the P. W. D. at Nasik in the Rabi and Malki numbers in Peint and 10,195 c. ft. were prepared at a cost of Rs. 7,450.

The firewood depot at Trimbak in West Nasik was continued. 800 c. ft. of firewood were supplied to the depot in addition to the balance of 58,401 in hand. The selling rate is annas 4 a maund for split and annas 3 for unsplit fuel. The other depot at Igatpuri was maintained ; here the total receipts were Rs. 1,726 and expenditure Rs. 521, which includes cost of establishment and transport but does not include the value of the wood which certain coupe contractors have to supply free as a condition of their agreement. The selling rate is annas 8 per Bengali maund for billets and annas 4 for bark and chips.

In Surat 2,206 maunds of mhowra flowers were collected and sold for Rs. 4,000.

In the Central Circle, 117,634 c. ft. of fuel were extracted departmentally from the Mahableshwar and Matheran forests for supply to the hill stations. Unsound and badly shaped trees were cut out of the exploited coupes in the three Khandesh Divisions and dead babul trees were exploited in the Poona and East Khandesh Divisions, Also 137 khandis of Hirda in the Poona Division and 159,222 lbs. of mhowra seed in the North and West Khandesh Divisions were collected departmentally. The crop of the latter was exceptionally heavy.

In the Southern Circle the quantities of both timber and firewood decreased from 1,701,754 c. ft. to 1,489,753 c. ft. and from 5,838,193 c. ft. to 4,394,154 c. ft. respectively. The chief reason is that in 1918-19 large contracts for supply to the

munitions were still in force and extra quantities were worked out for that supply. The Conservator remarks that the difficulties in connection with labour and transport increase from year to year and more railways are urgently needed for transport.

The work turned out by the Sawmills in the four Kanara Divisions is compared below :—

Name of material.	Outturn.									
	1919-20.					1918-19.				
	Kanara, N. D.		Kanara, E. D.	Kanara, C. D.	Kanara, W. D.	Kanara, N. D.		Kanara, E. D.	Kanara, C. D.	Kanara, W D
	Mill No. 1.	Mill No. 2.				Mill No. 1.	Mill No. 2.			
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
9' teak sleepeers ..	..	31	..	..	..	..	..	..	..	..
7' teak sleepers ..	1,951	73	..	..	27	951	..	..	..	111
Special teak sleepers ..	..	25	..	..	..	..	..	..	..	..
6' teak sleepers ..	8,235	5,704	20,091	..	79	23,778	991	14,746	67	987
Bridge teak sleepers ..	185	..	..	..	..	123	..	..	..	..
Teak planks cft. ..	5,759	1,611	..	..	778	6,542	1,238	..	..	393
Teak Scantlings ..	5,969	8,273	17,398	..	20,080	8,699	9,646	12,424	64	1,051
Teak Battens ..	11,844	5,747	..	..	2,659	11,632	4.515	..	11	929
9' matti sleepers ..	63	..	..	..	..	..	..	..	..	..
7' matti sleepers ..	578	271	..	..	270	..	..	..	..	..
6' matti sleepers ..	470	11	..	..	183	..	..	..	..	..
5' jungle wood do.	5,620	..	..	..	..	..	..	..	..	..
Junglewood cft. ..	..	6,592	..	6,488	..	..	5,079	..	..	7,527
Junglewood battens.	..	764	..	428	..	..	394	..	..	571
Junglewood planks ..	..	258	..	1,150	..	..	57	..	..	829
Paving blocks. ..	..	..	..	..	8,716	..	..	..	..	39
Junglewood material for bridges., cft. ..	..	..	..	..	3,365	..	..	..	..	995
Sissum scantlings do	..	200	..	..	..	..	..	..	..	..
Sissum planks do.	..	25	..	..	..	..	..	..	..	..
Sissum battens do.	..	9	..	..	..	..	..	..	..	..
Value of outturn estimated ..	Rs. 76,545	Rs. 61,090	Rs. 49,775	Rs. 12,012	Rs. 42,584	Rs. 120,682	Rs. 8,524	Rs. 64,238	Rs. ..	Rs. 5,114
Charges for running mills	35,489	22,500	7,614	3,408	21,860	47,731	26,666	45,311	1,130	9,902
Net income ..	41,056	38,590	42,161	8,604	20,724	72,951	18,142	18,927	..	4,788

The outturn of the private mill at Gunjawati was 17,449 sleepers and 7,369 c. ft. of other sawn material—a poor outturn.

The departmental fuel depôts in the coast talukas of Kanara maintained solely for the convenience of the local public were continued during the year at a considerable loss of revenue.

In Sind 18,598 c.ft. of timber and 1,616, 954 c.ft. of fuel were extracted in all divisions by thinnings and from erosion strips.

Departmental exploitation of one coupe in Sonda forest of the Karachi Division and two coupes in Khanote forest of the Hyderabad Division yielded highly satisfactory results as the following figures show :—

Expenditure.	Gross Revenue.	Net revenue.	Percentage of profit on capital outlay.
8,501	29,202	20,701	243·5

The net return to the State in the Sonda coupe being nearly eight times the average contract realizations under the standing sale system, and in Hyderabad Division, where working expenses were less economical, about four times.

These encouraging results point to the necessity of substituting departmental exploitation for private agency wherever possible, but progress is limited only by shortage of staff. During the current year further work of this kind is allotted to all Divisions in Sind; a variation in the working being made under which a contractor will work out the produce and receive out of the sale-proceeds a share in the rupee.

The arrangements made with contractors for sale of fuel at fixed rates to the townspeople of Sukkur, Rohri and Larkana were continued. These arrangements involve considerable sacrifice of Government revenue, but in the interest of the local public, they are considered necessary in order to check profiteering.

(ii). Purchasers.

Major and minor forest produce was removed by purchasers during 1919-20 and 1918-19 as follows :—

Circle.	Year.	Major produce,				Minor produce.			Total.
		Timber.		Fuel.		Bamboos.	Grass and grazing.	Other minor produce.	
		C. ft. in thousands.	Value.	C.ft. in thousands	Value.				
			Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Northern	1919-20	1,975	21,50,636	4,118	16,242	25,815	96,512	50,089	1,72,416
	1918-19	2,058	22,58,081	4,570	27,532	32,393	92,563	43,984	1,68,940
Central	1919-20	595	4,21,668	2,301	61,576	12,415	3,29,070	51,612	3,93,097
	1918-19	979	4,56,449	2,874	59,157	10,663	3,60,639	45,813	4,17,115
Southern	1919-20	1,088	4,21,906	3,208	1,53,443	43,657	57,459	54,707	1,55,823
	1918-19	855	3,01,702	6,468	1,91,940	41,270	75,830	53,491	1,70,591
Sind	1919-20	265	1,27,474	15,279	4,23,514	....	36,501	47,602	84,103
	1918-19	149	1,20,863	19,223	4,59,240	....	40,071	50,649	90,720
Total	1919-20	3,923	31,21,684	24,906	6,54,775	81,887	5,19,542	2,04,010	8,05,439
	1918-19	4,041	31,37,045	33,135	7,37,869	84,326	5,69,103	1,93,937	8,47,366
Difference		—118	—15,361	—8,229	—83,094	—2,439	—49,561	+10,073	—41,927

The outturn of both timber and fuel diminished by 3 and 3·3 per cent. and their values by .5 and 12·5 per cent. respectively. Also the total receipts for minor produce dropped by 5·1 per cent. There is a decrease under 'Bamboos' (2·9 per cent.) and 'grass and grazing' (9·5 per cent.) and an increase of 4·9 per cent. under 'other produce.'

The decrease under major produce is chiefly due to some coupes having remained unsold as the contractors had large stocks of wood on hand as a result of influenza and scarcity in the previous year and to the sudden discontinuance of supply to the Munitions. The decrease under minor produce mainly occurs under grass and grazing and is due to the abundant supply of fodder which was available outside forest limits.

In the Northern Circle there is a decrease in the quantity as well as value of both items of major produce and an increase in value realized for minor produce. In West and North Thana depots were run as shown below by contractors for supply of firewood near big coast towns. The coupes for these depots were sold standing in the ordinary way with the reservation that all wood other than teak, blackwood, tiwas and certain other useful timbers shall be sold at the depot at fixed rates :—

Division.	Depôt.	Firewood sold during the year.		Rate per maund of 28 lbs.		
		Khandies.	Maunds.	1st Cl.	2nd Cl.	3rd Cl.
West Thana ..	Virar Station ..	34	21	as. 2	as. 1¾	as. 1½
Do. ..	Bassein Road ..	683	0			
Do. ..	Bassein town ..	682	7	„ 2¼	„ 2	„ 1¾
North Thana ..	Umbergaon Gholwad ..	585	0	as. 1¼	per maund	of 28 lbs.
Do. ..	Dahanu ..	241	14			
Do. ..	Mahim ..	800	0			
Do. ..	Palghar ..	300	0			
Do. ..	Chinchani Tarapur ..	800	0			

The Central Circle shows deficit in the quantity and value of timber and in the quantity of fuel and a rise in the value of the latter. The value of minor produce also dropped by Rs. 24,018.

In the Southern and Sind Circles the quantity and value of timber increased while the opposite was the case with fuel and minor produce.

(iii) Rights and Privileges and free grants.

The following statement shows the quantity and value of forest produce removed under this head as compared with 1918-19 :—

Circle.	Agency.	Major produce.				Minor produce.			Total.
		Timber.		Fuel.		Bamboos.	Grass and grazing.	Other produce.	
		C.ft. in thousands.	Value.	C.ft. in thousands.	Value.				
			Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Northern ..	C.	..	..	6,528	2,43,334	12,000	3,75,000	40,000	4,27,000
	F.	8	6,170	..	..	..	..	..	..
Central ..	C.	..	..	754	51,304	..	21,472	2,848	24,320
	F.	16	6,184	3	511	95	..	595	690
Southern ..	C.	300	72,000	3,041	6,46,350	15,000	3,00,390	1,80,000	4,95,390
	F.	28	7,500	52	500	530	18,810	660	20,000
Sind ..	C.	..	..	19	221	..	2,500	..	2,500
	F.	2	459	6	36	..	6,011	4	6,015
Total ..	C.	300	72,000	10,342	9,41,209	27,000	6,99,362	2,22,848	9,49,210
	F.	44	20,313	61	1,047	625	24,821	1,259	26,705
Total of 1918-19.	C.	357	2,43,000	12,345	9,19,420	27,000	7,35,627	2,88,568	10,51,195
	F.	55	15,735	66	958	1,204	36,686	998	38,888

C=Concessionists. F=Free grantees.

No rights exist in any circle.

Privileges were enjoyed as usual under the prescribed Code for each district. The fluctuations in the quantities of produce extracted under this head are always difficult to account for. The estimated value of all produce removed was Rs. 19,62,419 as against Rs. 22,13,615 in 1918-19.

Free grants.—These were made to a value of Rs. 48,065 as against Rs. 55,581 in the previous year and for the usual objects such as rewards for fire protection or rebuilding houses, temples and schools.

(c) *Outturn and Sources of Forest Produce.*

(Forms Nos. 17, 19, 20, 21 & 22).

The outturn from all sources of forest produce during the two years compares as follows :—

Circle.	Year.	Major Produce.			Minor produce.		
		Timber cft. in thousands.	Fuel c.ft. in thousands.	Sandal wood.	Bamboos.	Grass and grazing.	Other.
				Rs.	Rs.	Rs.	Rs.
Northern ..	1919-20	2,202	10,959	..	39,609	5,05,103	93,177
	1918-19	2,440	13,224	..	61,525	4,71,967	1,49,984
Central ..	1919-20	621	3,349	2,407	12,528	3,50,542	69,312
	1918-19	1,019	4,138	..	10,750	4,23,686	59,383
Southern ..	1919-20	2,906	10,695	57,120	82,296	4,35,120	2,36,008
	1918-19	2,882	15,403	62,163	1,26,344	3,92,341	2,37,035
Sind ..	1919-20	285	16,922	..	..	45,012	49,829
	1918-19	199	20,925	..	..	53,833	52,204
Total ..	1919-20	6,014	41,925	59,527	1,34,433	13,35,777	4,48,326
	1918-19	6,540	53,690	62,163	1,98,619	13,41,827	4,98,606
Difference ..		—526	—11,765	—2,636	—64,186	—6,050	—50,280

There are on the whole decreases under all kinds of produce. These have been explained in section 5, sub-section (b) (i) (ii) and (iii).

The number of cattle for which grazing was allowed in forests during the two years is as follows :—

	1919-20.	1918-19.
Buffaloes, cows and bullocks	1,883,479	2,289,008
Goats and sheep	284,881	368,755
Camels	2,291	3,777
Other animals	16,408	12,613
Total ..	2,187,059	2,674,153
Difference ..	—487,094	
Free	733,731	653,666
On fee	1,453,328	2,020,687
Total ..	2,187,059	2,674,153

The total expenditure incurred on the 'management of State Forests' during the two years compares as follows :—

	1919-20. Rs.	1918-19. Rs.
Northern Circle	4,15,060	3,26,916
Central Circle	1,38,122	1,04,037
Southern Circle	16,20,169	19,02,406
Sind	59,872	53,375
Total ..	22,33,223	23,86,734
Difference.	—1,53,511.	

CHAPTER III.

Financial Results.

The revenue and expenditure of the year compare with those of the previous year and the average of the previous quinquennium as follows :—

Circle.	Year.	Revenue.	Expenditure. A	Expenditure. B	Expenditure. Total.	Surplus.	Percentage of net revenue to gross revenue.
		Rs.	Rs.	Rs.	Rs.	Rs.	
Northern ..	1919-20	25,56,424	4,39,461	5,48,225	9,87,686	15,68,738	61·4
	1918-19	29,54,859	3,52,581	4,99,008	8,51,589	21,03,270	71·2
	Average	18,35,840	2,19,296	4,00,741	6,20,037	12,15,803	66·2
Central ..	1919-20	9,95,259	1,63,934	5,47,623	7,11,557	2,83,702	28·5
	1918-19	10,48,454	1,22,571	4,90,842	6,13,413	4,35,041	41·5
	Average	8,76,254	1,29,241	4,08,640	5,37,881	3,38,373	38·6
Southern ..	1919-20	28,16,913	16,03,278	5,50,105	21,53,383	6,63,539	23·6
	1918-19	32,35,937	20,32,130	4,92,344	25,24,474	7,11,463	22
	Average	20,94,463	9,03,826	3,94,928	12,98,754	7,95,709	38
Sind ..	1919-20	7,37,414	59,872	2,28,383	2,88,255	4,49,159	60·9
	1918-19	7,72,890	53,449	2,07,122	2,60,571	5,12,319	66·3
	Average	4,96,013	39,717	1,83,270	2,22,987	2,73,026	55·4
General Direction including Bombay Forest College	1919-20	26	973	62,007	62,980	—62,954	..
	1918-19	9	196	46,365	46,561	—46,552	..
	Average	..	..	..	..	..	..
Utilization ..	1919-20	..	470	9,079	9,549	—9,549	..
Total for Presidency..	1919-20	71,06,036	22,67,988	19,45,422	42,13,410	28,92,626	40·7
	1918-19	80,12,149	25,60,927	17,35,681	42,96,608	37,15,541	46·3
	Average	53,02,570	12,92,080	13,87,579	26,79,659	26,22,911	49·4
Difference between	1919-20 / 1918-19	—9,06,113	—2,92,939	+2,09,741	—83,198	—8,22,915	

Total gross revenue for the Presidency decreased by 9 lakhs, the surplus by 8·2 lakhs and the expenditure by ·9 lakh as compared with the previous year. This decrease is shared by all circles as shown below :—

Circle.	Gross revenue by lakhs.	Expenditure by lakhs.	Net revenue by lakhs.
Northern	—4·	+1·3	—5·3
Central	—0·5	+0·9	—1·5
Southern	—4·1	—3·7	—0·5
Sind	—0·4	+0·3	—0·6
General Direction	..	+0·3	—0·3
Total ..	—9·0	—0·9	—8·2

Northern, Central and Sind Circles show a decrease in both gross and net revenue and increase in expenditure, while Southern Circle shows a decrease both in revenue and expenditure.

Revenue.—The decrease as compared with the previous year is chiefly due to lower receipts for major produce following on the slackening of the demand with the cessation of the war which left large stocks in the hands of contractors and led to a reduction of exploitation. These circumstances were aggravated by shortage of labour caused by the reappearance of the influenza epidemic and a shortage of supply of railway waggons in the Presidency circles. Owing to difficulty experienced by contractors extension of the time limit for payment of dues on current contracts had to be granted. In the Southern Circle the outstandings against the munitions alone amounted to Rs. 1,98,629 at the close of the year.

The increase over the previous 5 years' average, however, shows a gradual rise in the normal demand for all forest produce. To some extent it is also due to improvements in communications, especially in the Northern and Southern Circles. In the Northern Circle the revenue is still capable of expansion by lakhs when the problem of communications in the Dangs and Peint has been solved. Similarly in the Southern Circle it is hoped that with the extension of the railway in Kanara and the improvement of roads undertaken on a large scale many lakhs will be added.

Expenditure.—The increase over the previous year is ascribed to various causes. They are under A—Conservancy and Works, the construction of roads and buildings on an extensive scale, the very great rise in rates of labour and consequent increase in contract wages and under B—Establishments, the revised pay sanctioned for the Imperial Forest Service, the enhanced rates of permanent travelling allowance sanctioned for Rangers and Foresters and the grant of temporary and provisional allowance to subordinates.

The sources from which forest revenue was derived and the objects of expenditure during the two years are as follows :—

Sources.	General Direction including Bombay Forest College and Utilization Circle.	N.C.	C.C.	S.C.	Sind	Total. 1919–20	Total. 1918–19	Increase or decrease.
Receipts.								
Ia and IIa, Timber ..	..	22,62,571	4,22,085	19,84,196	1,38,441	48,07,293	53,20,829	—5,13,536
b and IIb, Firewood and charcoal ..	..	26,336	91,158	4,97,874	4,69,591	10,84,959	13,11,289	—2,26,330
Ic and IIc, Bamboos	..	27,610	12,433	66,767	15	1,06,825	1,70,415	—63,590
Id, Sandalwood ..	..	50	2,407	57,120	..	59,577	68,247	—8,670
IId, Grazing and fodder grass ..	..	96,512	3,29,071	57,459	36,501	5,19,543	5,69,103	—49,560
Ie and IIe, other produce ..	..	81,816	65,870	64,969	49,825	2,62,480	3,40,947	—78,467
III, drift and confiscated forest produce	..	1,442	1,768	162	783	4,155	5,625	—1,470
IV, Forest not managed by Government	..	6,073	7,065	..	..	13,138	12,719	+419
V, Miscellaneous ..	26	54,014	63,402	88,366	42,258	2,48,066	2,12,975	+35,091
Total Revenue.	26	25,56,424	9,95,259	28,16,913	7,37,414	71,06,036	80,12,149	—9,06,113

Objects.	General Direction and Bombay F.C. and Utilization Circle.	N.C.	C.C.	S.C.	Sind.	Total 1919–20	Total 1918–19	Increase or decrease
Expenditure.								
A-Conservancy and works.								
I, Timber extracted by Government Agency.	..	1,37,318	22,988	9,11,730	20,993	10,93,029	14,55,445	—3,62,416
II, Timber extracted by purchasers ..	..	49,555	20,303	6,185	191	76,234	58,534	+17,700
III, Drift and confiscated forest produce	..	18	53	87	28	186	233	—47
IV, Forest not managed by Government ..	..	..	..	..	..	..	2	—2
V, Rent of leased forest	..	21,980	19,930	..	..	41,910	39,604	+2,306
VI, Stores, tools and plant ..	1,179	3,856	1,918	44,003	2,379	53,335	23,674	+29,661
VII, Communications and Buildings ..	..	1,39,293	43,430	4,85,247	10,877	6,78,847	7,48,998	—70,151
VIII, Organizations and Improvement..	..	51,224	30,940	1,20,132	18,890	2,21,186	1,82,141	+39,045
IX, Miscellaneous ..	264	36,217	24,372	35,894	6,514	1,03,261	52,296	+50,965
Total A .. Consevancy and works.	1,443	4,39,461	1,63,934	16,03,278	59,872	22,67,988	25,60,927	—2,92,939
B. Establishment.								
I, Salaries ..	54,329	4,56,623	4,66,405	4,60,451	1,87,791	16,25,599	14,99,935	+1,25,664
II, Travelling allowances ..	10,756	70,361	66,305	69,805	26,495	2,43,722	1,61,021	+82,701
III, Contingencies ..	6,001	21,241	14,913	19,849	14,097	76,101	74,725	+1,376
Total B Establishments.	71,086	5,48,225	5,47,623	5,50,105	2,28,383	19,45,422	17,35,681	+2,09,741
Total expenditure ..	72,529	9,87,686	7,11,557	21,53,383	2,88,255	42,13,410	42,96,608	—83,198
Surplus 1919–20 ..	—72,503	15,68,738	2,83,702	6,63,530	4,49,159	28,92,626	..	..
Surplus 1918–19 ..	—46,552	21,03,270	4,35,041	7,11,463	5,12,319	..	37,15,541	..
Difference ..	—25,951	—5,34,532	—1,51,339	—47,933	—63,160	—8,22,915	..	..

Receipts.

The decreases under 'Timber' and 'Firewood' are due partly to the discontinuance of the supply of timber and fuel for the Munitions and partly to some coupes having remained unsold, that under 'Bamboos' to the former reason and that under 'I-e and II-d, Grass and Grazing' to the abundant supply of fodder which was available outside forest limits.

Expenditure.

A I The decrease is due to discontinuance of departmental exploitation of forest produce for the Munitions.

A II The increase is owing to greater expenditure incurred for marking coupes for exploitation.

A V The increase is ascribed to greater amount paid for shares to Khots in the Central Circle.

A VI Do. to greater expenditure incurred on upkeep of Government cattle and on Saw Mill accessories.

A VII The decrease is owing to part cost of forest railway being included in 1918-19.

A VIII The increase is due to acquisition of lands withheld in previous years and cultural operations carried out on an extensive scale.

A IX Do. to full supply of uniforms to subordinates.

B The reasons for the increase have been explained above.

A further analysis of the revenue and expenditure according to classes is as follows :—

Revenue.

Classes.	General Utilization B. F. C.		Northern Circle.		Central Circle.		Southern Circle.		Sind Circle.		Total.	
	Rs.	P.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.
Major produce ..	..	..	22,88,907	89·5	5,13,243	51·6	25,39,361	88·03	6,08,047	82·4	59,49,558	83·8
Minor produce ..	..	..	2,13,503	8·4	4,09,781	41·2	1,89,186	8·90	87,109	11·8	8,99,579	12·6
Miscellaneous ..	26	..	54,014	2·1	72,235	7·2	88,366	3·07	42,258	5·8	2,56,899	3·6
Total ..	26	..	25,56,424	..	9,95,259	..	28,16,913	..	7,37,414	..	71,06,036	..

Expenditure.

Classes.	General Utilization B. F. C.		Northern Circle.		Central Circle.		Southern Circle.		Sind Circle.		Total.	
	Rs.	Rs.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.	Rs.	Percentage.
Extension and constitution. ..	..	..	2,404	0·6	1,697	1·	5,952	0·36	55	..	10,108	0·4
Improvment ..	..	..	2,24,330	51·0	1,16,975	71·4	5,99,427	36·86	38,605	64·6	9,79,337	43·2
Exploitation ..	1,443	..	2,12,727	48·4	45,262	27·6	9,97,899	62·78	21,212	35·4	12,78,543	56·4
Total A. ..	1,443	..	4,39,461	..	1,63,934	..	16,03,278	..	59,872	..	22,67,988	..
Administration ..	71,086	..	35,495	6·5	67,939	12·3	1,70,154	30·93	76,878	33·6	4,21,552	21·8
Executive ..	..	..	2,01,480	36·7	2,29,921	41·9	1,89,798	34·50	68,959	30·2	6,90,158	35·6
Protective ..	..	..	3,11,250	56·8	2,49,763	45·8	1,90,153	34·57	82,546	36·2	8,33,712	42·6
Total B. ..	71,086	..	5,48,225	..	5,47,623	..	5,50,105	..	2,28,383	..	19,45,422	..

The outstandings on account of revenue were as under :—

Circle.	At the Commencement of the year.	At the close of the year.
	Rs.	Rs.
Northern	2,62,083	1,14,348
Central	27,538	13,976
Southern	10,73,169	12,25,367
Sind	1,28,079	67,571
Total ..	14,90,869	14,21,262

The outstandings due to the department by contractors and disbursers were as follows :—

Circle.	At beginning of the year.	At end of the year.
	Rs.	Rs.
Northern	46,266	54,292
Central	11,679	19,880
Southern	5,77,451	6,99,956
Sind	6,351	14,491
General (Direction including Forest College)	....	376
Total ..	6,41,747	7,88,995

The increase is due to the difficulties encountered by both contractors and disbursers in getting works completed and so in recovering the advances.

The summary of the year's transanction is as follows :—

Circle.	In favour of the year.	Against the year.
	Rs.	Rs.
Value of timber and other produce at sale depôts, Form No. 22	10,81,253	....
Value of live and dead stock, Form No. 23	90,760	....
Cash surplus, Form No. 24	28,96,407	....
Outstandings on account of revenue, Form No. 26 ..	....	67,607
Outstandings on account of contractors and disbursers, Form No. 27	1,46,872	
Total ..	42,15,292	67,607
Net value of transactions, 1919-20	41,47,685	
1918-19	50,23,322	
Decrease ..	—8,75,637	

CHAPTER IV.

Research and Experiments.

The following details are reported by the Conservators :—

Northern Circle.

Tarwad (*Cassia auriculata*) *cultivation.*—The bulk of this work was done in Panch Mahals in 1918-19. As a result of 80 maunds of seed dibbled that year over a total area of 2,803½ acres, 74,063 plants were reported to have been

established in June 1920. This year further dibbling only was done at a cost of Rs. 200-2-9. In Nasik, operations were confined to the North and East Divisions. In the former 561 acres were dibbled over with nearly a ton of seed at a cost of Rs. 120-9-0. The scarcity of rain prevented good results from last year's sowings, but it is believed that the root-systems are in most cases established and will send up plants if only enough rain falls. In Sinnar Range of East Nasik 450 lbs. seed were dibbled in without expenditure by the guards. Here the sowings of the past two years have given 35 per cent. of germinations, the seedlings being 6″ to 1′ high.

Timber seasoning.—The seasoning of logs of *Pterocarpus marsupium* in West Thana by immersion in water was continued and it was found that they split badly.

Rosha oil.—Work was continued in North Nasik with the plant for steam distillation of Rosha oil. Nine thousand seven hundred and thirty-two lbs. of grass yielding 1,361 ozs. of oil had been disposed of when owing to inherent defects and the difficulty of remedying them at so far outlying a place, the plant broke down and distillation proceeded on the old lines. It has now been decided not to sell the plant to the contractors, or even try to work it in that locality, till it has been overhauled and experimented with under the eye of expert mechanics. For this purpose it has been sent back to the Central Workshops at Dapuri where a truck-load of Rosha grass will follow it in the season. If experiments are satisfactory the plant would best be run departmentally for a season in the jungle before being sold to contractors.

Central Circle.

Tarwad.—Tarwad seed sown in all Divisions except Kolaba germinated splendidly and the plants are flourishing. Provided the monsoon is normal and the seedlings are weeded there is no difficulty in growing this plant.

Sallai (*Boswellia serrata*).—In the North Khandesh Division the tapping of the Sallai trees was continued on a small scale and 3 maunds of the resin were supplied to the Director of Industries, Bombay, and about three-fourths of a maund to Messrs. Paddamsey Kooverji of Bombay for experimental purposes. It is hoped this product will be of commercial value.

Divi-divi (*Caesalpinia coriaria*).—In the Kolaba Division some 300 more Divi-divi plants were put out. The plants formerly put out are still alive but are not very flourishing.

Southern Circle.

Pig-proof fencing.—Experiments were carried out in Gadgeri (Kanara Northern Division) and Kirwatti (Kanara Eastern Division) in the erection of pig-proof fences from waste material from the saw-mills. Pigs were kept out, but elephants walked through one of the fences and did much damage to the crops inside.

Seeding of Karvi (*Strobilanthes*) *and bamboos.*—Karvi seeded in the Virnoli Range (N. D. Kanara) and on the ghats of Eastern and Central Divisions of Kanara. In S. D. Kanara most of the bamboos that had not seeded before seeded during the year under report and very few are left now in isolated places.

Experiments were made in Kanara Eastern and Central Divisions in cutting back flowering Karvi with a view to prevent its seeding and propagation. The experiments were successful and it was found best to cut the Karvi back late in the season just before the seeds form; if cut too early it sends out fresh flowering shoots.

Tali Palm (*Corypha umbreculifera*) *fibre.*—Samples of Tali Palm fibre were sent from Kanara Southern Division to various firms, but nothing very definite is known of the results yet.

Cross-cutting billets with saws.—A small experiment was carried out in Belgaum Division in the use of saws instead of axes for cross-cutting fuel billets but the method proved very expensive. If tried on a bigger scale with trained sawyers it might prove more successful.

Tarwad.—Tarwad sowing was carried out in Belgaum and Dharwar-Bijapur Divisions with fair success.

Sind Circle.

Sowing and planting.—A few seedlings of *Prosopis glandulosa* were successfully raised in Rahuja garden of the Sukkur Division and are in thriving condition.

Sandal seed (*Santalum album*) was also sown in Rahuja and all nurseries but the Divisional Forest Officer, Sukkur, reports that it is yet too early to predict results.

Cæsalpinia brevifolia seed sent by the Chief Conservator of Forests, Bombay Presidency, was tried in Zerkhel plantation of Kot-Sultan forest of the Shikarpur Division but was a failure, no germination being secured.

Tali (*Dalbergia sisoo*) was raised in some of the riverain forests along the banks of Dhandhs by direct sowing after soil-wounding with a view to ascertain possibility of economical propagation of the species by this means. The seed germinated well. The experiment, says the Divisional Forest Officer, Larkana, being as yet in its early stages, no definite pronouncement as to its success or otherwise can be made at present.

Woods for Match manufacture.—Under instructions from the Director of Industries, Bombay, a few Bahan (*Populus euphratica*) logs were supplied to the Gujrat Islam Match Manufacturing Company for experiments in match-making but when actually put to test the wood was reported by the Company to be unsuitable on account of

(1) Red colour.
(2) Excessive weight.
(3) Crooked grain.
(4) Large percentage of heartwood.

Lac propagation.—Attempts to propagate lac artificially in the Halla Range of the Hyderabad Division met with no success, the inoculation of 150 trees yielding no results.

The cold weather crop only of lac in Karachi was collected departmentally as an experimental measure at a cost of Rs. 345-0-8 for 33 maunds and 15 seers, and was sold for Rs. 1,335, the amount realised in 1918-19 being Rs. 2,055. The decrease was due to the reservation of the hot weather crop. This reservation was done as an experiment to see what effect it has on the increase of the next cold weather crop and whether it will result in an increased crop and revenue, as it has done elsewhere in India.

The Special Officer appointed by the Government of India to conduct an enquiry into the Lac Industry was unable to visit the forests of this circle during the year.

Tarwad.—Tarwad has shown itself entirely unadapted to the climatic conditions of Upper Sind. It cannot stand the winter frosts at all and its cultivation in the Province should be strictly confined to Lower Sind, mainly the Delta region and vicinity of the sea coast.

Wood distillation.—The possibilities of this industry were examined and it was found there is no opening in this Presidency on a commercial scale, on account of the impossibility of getting a sustained supply of material.

Barrel-making.—Experiments in barrel-making at Dandeli yielded the following results :—

Woods found suitable for Barrel-making.

Teak (*Tectona grandis*)	.. Very good.	Oily.	Medium	Works well.
Nandi (*Lager-stromia microcarpa*)	.. „ „	*Nil*	„	„ „
Heddi (*Adina cordifolia*) ..	.. „ „	Yellow stain	„	.. „
Kindal (*Terminalia paniculata*)	.. Good	*Nil*	„	„ fair.
Kalam (*Stephegyne parvifolia*)	.. „	Stain	Light	„ well.
Woombe (*Saccopetalum tomentosum*)	.. „	„	„	„ „
Dhamni (*Grewia tiliaefolia*)	.. Very good	*Nil*	Medium	„ „
Matti (*Terminalia tomentosa*)	.. Fair	Stain	Heavy	„ difficult.
Jamba (*Xylia xylo carpa*) ..	.. „	„	„	„ „
Karambel (*Dillenia pentagina*)	.. Good	*Nil*	Medium	„ fair.
Dhaman (*Grewia abutilifolia*)	.. „	Stain	Light	„ well.
Honni (*Ptero carpus marsupium*)	.. Very good	„	Medium	.. „

For 40 gallon casks 2 c. ft. of wood is required. One cooper will work up 1 cask in 3 days. For cement barrels one cooper will make up a barrel per day. One and half c. ft. of wood is required for cement barrels.

For 40 gallon casks seasoned timber is required to be sawn from the log.

For cement, soda, crystals or globular salts or any solid materials for which barrels are needed the staves of barrels could be made from the waste slabs from the junglewoods which means great reduction in cost.

Shooks for 'Gur' boxes.—As a result of the enquiries and experiments started last year, the Belapur Company have placed an order of 24,000 teak shooks for 'Gur' boxes. These will be prepared at the Government Sawmills in Kanara from waste material (slabs) lying in the Sawmill yards.

CHAPTER V.

ADMINISTRATION.

Mr. Bell was Chief Conservator of Forests till 2nd February 1920 when he retired, handing over charge to Mr. Copleston.

The Circle charges were held by the following officers :—

Northern Circle	Mr. W. F. D. Fisher	.. 7 months.
	,, E. M. Hodgson	.. 3 weeks.
	,, C. E. L. Gilbert	.. 2½ months.
	,, D. A Thomson	.. 3 weeks.
	,, G. E. Marjoribanks	.. 1 month.
Central Circle	Mr. J. Dodgson	.. throughout the year.
Southern Circle	Mr. W. E. Copleston	.. 7 months.
	,, G. E. Marjoribanks	.. 1 month.
	,, E. M. Hodgson	.. 3 months.
	,, A. G. Edie	.. 1 month.
Sind Circle	Mr. P. E. Aitchison	.. 5 months.
	,, H. L. Newman	.. 7 months.

A new Circle called the Utilization Circle was created in February 1920 and Mr. Thomson was put on special duty to organize it. A short résumé of the work carried out by him during the year is printed at the end of this chapter.

The changes in the divisional charges were as follows :—

Circle.	Division which remained in charge of the same officers throughout the year.	Divisions which changed hands and Number of officers who held charge.	
Northern	North Thana	Panch Mahals	.. Two
	West Thana	Surat	.. Two
	North Nasik	East Thana	.. Two
		West Nasik	.. Two
		East Nasik	.. Two
Central	West Khandesh	East Khandesh	.. Two
	Poona	North Khandesh	.. Two
	Kolaba	Satara	.. Two
Southern	Dharwar-Bijapur	Northern Kanara	.. Two
		Eastern Kanara	.. Three
		Central Kanara	.. Three
		Southern Kanara	.. Two
		Western Kanara	.. Three
		Belgaum	.. Two
Sind	Sukkur	Karachi	.. Two
	Larkana.		
	Hyderabad.		
	Shikarpur.		

In no circle was there a whole-time Working Plan Officer during the year.

Imperial Forest Service.

No new recruits joined during the year, while the existing staff was further depleted by the retirement of Messrs. Bell and Duxbury and Dr. Gustasp and the grant of long leave to Mr. Fisher preparatory to retirement. This left 7 vacancies in the sanctioned Imperial cadre of 27 (excluding 1 officer under the Government of India). Mr. Maitland Kirwan returned from Dehra Dun in April and was appointed Principal of the Bombay Forest College, Dharwar, the opening of which was sanctioned during the year and which commenced training of students for the Rangers' Course from 1st July 1920.

Of the four temporary forest officers appointed during the year, Captain Shannon was posted to the Northern Circle and Captain Calder, Lieutenant Segar and Captain Lovell to the Southern Circle. The last-named officer was, within about 2 months of his joining, deputed for duty under the Munitions Board.

The General Direction and Direction charges were held by Imperial Forest Officers. Of the 26 Divisions, 9 were held wholly by Imperial Officers, 5 partly by Imperial and partly by Provincial Officers and 12 wholly by Provincial Officers.

The revision of pay of the Imperial and Provincial Forest Services was sanctioned during the year. Sanction to the increase in the strength of both the services proposed in the general re-organization scheme is still awaited. Until that is received and the necessary number of additional Forest Officers and Engineers is provided, progress with working plans, tramways, communications and several other matters connected with development will necessarily be handicapped. At present the Department is seriously undermanned.

Bombay Forest Service.

Whole-time officers were not available for 8 out of the 19 sub-divisional charges, as Provincial Officers were appointed to hold charge of Divisions vacated by Imperial Officers.

Mr. B. J. Patel, Extra Assistant Conservator of Forests, retired during the year.

Mr. R. R. Hattiangadi was appointed Instructor at the Bombay Forest College.

Mr. D. D. Anantbhat was on deputation to Ratnagiri District to draw up a scheme for planting of *Casuarina* on the coast.

A temporary appointment of Extra Assistant Conservator was created for a short period and for the Karachi Forest Division and Mr. P. J. Rodrigues, Ranger, was appointed to hold it as Sub-Divisional Officer to assist the Deputy Conservator, Sind Circle (who holds charge of the Division).

Subordinate Forest Clerical and Menial Services.

All services are eagerly looking forward to the re-organization of their pay. Proposals for the increase in the cadre and pay of the above services including Depôt, Surveyor and Saw Mill establishments are before Government. The present rates of pay have proved quite inadequate owing to the abnormal rise in prices as a result of the war and until rates are revised the recruitment for these services will continue to be unsatisfactory. Difficulty is experienced in getting men to accept the lower paid appointments, which often remain vacant, and it is still harder to exact work and good conduct from them because they do not mind the risk of losing such ill-paid employment.

Eleven trained Rangers arrived in April 1920 from Dehra Dun, of which 1 stood 1st among the successful candidates of the year and secured Higher Standard Certificate with Honours, 7 secured Higher Standard Certificates and 3 Lower Standard Certificates.

Fourteen trained recruits are expected in April 1921, 9 from Dehra Dun and 5 from Coimbatore. Sixteen students are undergoing the first year's course, 7 at Coimbatore and 9 at the newly opened Dharwar Forest College.

Casualties and punishments.

These were as follows :—

Casualties.	N. C.	C. C.	S. C.	Sind.	Total.	
					1919-20.	1918-19.
1 Retirements	14	20	4	3	41	38
2 Deaths	30	17	16	3	66	253
3 Resignations	28	26	22	37	113	109
4 Prosecutions	..	1	10	..	11	5
5 Degradations	14	..	17	11	42	36
6 Dismissals, removals or supersessions ..	38	33	36	30	137	123

The above figures do not call for any special comment, except that the number of deaths decreased as there was no general epidemic like the influenza of the previous year.

In the Northern Circle, the accused guard who had absconded with Government money and was traced to the Portuguese Territory last year has not been arrested. Of two cases of theft of Government money, one ended in conviction and the offenders in the other are untraced.

The Depôt officer, who was under trial last year in the Central Circle, was sentenced to six weeks' rigorous imprisonment. A Ranger has been under trial under sections 409 and 420 of the Indian Penal Code and another was dismissed from the service for misconduct.

A sum of Rs. 184 was stolen from the Cash box of the Range Forest Officer, Sujwal, in Sind. The thief having absconded could not be traced. The stolen amount was recovered from the Range Forest Officer. Two thefts of Government articles occurred in the Sukkur Division. In the one the thief could not be found and in the other the offender was sentenced to six months' rigorous imprisonment.

Civil Suits.

A Coupe Contractor of Taloda in the Central Circle has instituted a civil suit against Government on account of the cancellation of his agreement. The suit is pending.

Inspection.

All the Divisional Offices in the Northern and Central Circles and in Sind with one exception were inspected by the Conservators, who report that no very serious irregularities were noticed. In the Southern Circle none were examined, as the Conservator states, owing to the pressure of work and frequent changes in the personnel.

The relations between District and Forest Officers were uniformly satisfactory and the thanks of the department are due to the former for their considerate help and support.

The Conservators' remarks on the work of officers are quoted below :—

Northern Circle.—" In the major charges the Divisional Forest Officers specially mention Rangers Messrs. K. V. Mankikar, G. R. Desai and Kuruwilla in West, and Mr. Madval in North Thana for plantation work ; Messrs. Khanna, K. D. Sathaye and M. G. Desai in Surat for keenness and efficiency, and Messrs. Y. B. Pattan and M. S. Kazi in Panch Mahals, where also Mr. C. K. Amin has sustained his past record of strenuous work."

Central Circle.—" The Divisional Forest Officers report the conduct of the Rangers, with one or two exceptions, as satisfactory. Those specially reported for marked keenness and ability being Messrs. Phatak, Doctor, Gupchup, Dharap, Sane, Vanjari and Limaye."

Southern Circle.—" The writer of this report took over charge of the Circle near the end of the year, and will not now make any remarks regarding the work of the staff. It may be mentioned, however, that all grades of the service are eagerly looking forward to a reorganization of pay and allowances which will give them at least a decent living wage, which many of them have not got at present."

The Chief Conservator who was in charge of the Southern Circle for 7 months, records his appreciation of the work of the forest staff generally. Owing to labour difficulties forest contractors and the forest staff have to contend with great difficulties especially in the Kanara Teak Forests.

Sind Circle.—" The Deputy Conservator in charge Sind Circle reports unfavourably on forest work generally in Sind owing to lack of trained and competent men and to the difficulty of securing suitable men owing to the low rates of pay."

In the General Direction office the Personal Assistant, Mr. Chandawarkar, has shown zeal and ability throughout the year.

At the close of the year a new Division was created, the " School Division " with the Principal of the Bombay Forest College in charge. It consists of the Nagargalli High Forest Block and 17 Pole Blocks of the Dharwar and Kalghatgi Working Plan areas and will be a good training ground for the students at the new Forest College. The area involved has been divided into three ranges called Nagargalli, Kalkeri and Kalghatgi and each of these has been placed under a Ranger.

New ranges were formed by redistribution of the existing ranges as follows :—

Northern Circle.—Sawe in North Thana and Barhe in West Nasik. A proposal for splitting up two of the Dang ranges in Surat into four is before Government.

Central Circle.—Bhosgaon in Satara, Sangamner in Poona and Kolad in Kolaba.

Southern Circle.—Gokak in Belgaum.

The Conservators' remarks on revenue administration of Forest Mahals and on inforest settlements are reproduced below :—

Land Revenue Administration.

Northern Circle.—" In furtherance of the policy for developing the forests and improving conditions generally in Peint, Government in their Order No. 364 of 5th February 1920 (R. D.) appointed the Divisional Forest Officer, West Nasik, to be ex-officio Assistant Collector for that Taluka. Unfortunately this order has had to remain in abeyance as the Imperial Officer in charge was just going on leave and the Division had to be " doubled up " with North Thana nor is the wholetime Imperial Officer yet available for this important charge."

Central Circle.

Akrani.—" The Akrani Mahal was administered by the Divisional Forest Officer, North Khandesh, with the Akrani Ranger as Mahalkari. The usual rate of assessment, annas four per acre and annas two per acre in the eastern hill portion were taken according to eye-guess work (Nazarbandi) ; this brings out a considerable decrease in the area cultivated. The reason for this is the influenza epidemic which decimated the population of the Mahal in the previous year. During the year under report there was again an influenza epidemic which devastated the population of a few villages, but it was very local. The long awaited Sub-Assistant Surgeon has been recently appointed and a dispensary opened in the Dhadgaon chavdi but it is too early to speak of results. The erection of a regular dispensary and quarters for the Doctor, etc., at Dhadgaon has been sanctioned by Government. But when the work will be done is not known. If a Sub-Assistant Surgeon is to remain at Dhadgaon, it is essential that quarters be erected for him at once.

" The season was a good one for the cultivators and the people were prosperous throughout.

"The recovery of Tagai advances was effected with no trouble, some Rs. 18,549 capital and Rs. 1,752 interest being repaid as compared with Rs. 782 and Rs. 64 interest in 1918-19.

"Rs. 8,000 have been advanced as compared with Rs. 13,780 in the previous year.

"The Government primary education went on in even more unsatisfactory fashion than usual. The school at Kamot was closed down but that at Dhadgaon continued fairly well. The present school master is reported to be doing fairly well, and should be encouraged. He should certainly be given decent quarters to live in. The Mission school at Mandalwad is reported to be doing well.

"The Divisional Forest Officer reports no visible change in the condition of the people, who, he writes, are steeped in drink, ignorance and sloth, and is of the opinion that little improvement will ever be effected until Dhadgaon and Akarni cease to be regarded as a penal settlement. All the departments concerned in the administration of the Akrani should send their best men there and this can only be done by giving decent pecuniary inducements to compensate for the inconveniences and dearness of commodities due to long distances from the nearest bazars. Improvement in communications will certainly assist in bringing new life into the Mahal by bringing it into contact with outside trade and influences. Some Rs. 1,200 were spent on improving bridle paths during the year under report and the Public Works Department survey of the Dhadgaon-Mandvi-Dara line was completed. It is proposed to start work on this road next season. The Collector, West Khandesh, held a durbar at Dhadgaon during the season at which the Divisional Forest Officer was present when rewards in the shape of Puggris were made to deserving and selected Patils. Certain liquor frauds by the liquor contractor were brought to light at this gathering and the contractor's license was suspended."

Raisingpur Estate.—"The management of this Estate, which is situated to the west of the Taloda Range, was transferred to this department, acting under courts of wards, West Khandesh, under Government Order, Financial Department, No. 5528 dated 10th September 1919.

"A protective staff under a Range Forest Officer was drafted into the Estate and considerable progress was made in the settlement of cultivators on cleared areas and improvement of cart tracks. Over Rs. 4,000 were distributed on Tagai advances and in 10 of the largest villages Kamdars have been sanctioned.

"The annual fellings were carried out in the forests of the Estate according to the prescriptions of the Working Plan.

"A school was started at Raisingpur with some measure of success as the ordinary daily attendance is 27."

Southern Circle.—"In Kanara Northern Division four forest Mahals, in Kanara Eastern Division three, in Kanara Western Division one (Supa Petha) and in Belgaum two Mahals were under the respective Divisional Forest Officers as regards the land revenue administration. Two Mahals, Mahime and Magod comprising 21 villages of Honavar Taluka, were created in the Kanara Southern Division during the year under report but the appointment of Range Forest Officers as Mahalkaris and transfer of charge has been postponed till after the monsoon. It is believed that the administration of the Mahals was satisfactory."

Inforest settlements.

Central Circle.—"In the North Khandesh Division the inforest settlements increased by two and there are now 26 settlements containing 482 people.

"In the East Khandesh Division also two new inforest settlements were started, but two of the old settlements, at Karjana and Deozari, in the Chopda Range are reported as not doing very well.

"Both the Divisional Forest Officers took a lively interest in these settlements and their efforts were rewarded in that the settlers gave valuable assistance in fire protection and also supplied valuable labour in a tract where labour is most difficult to obtain. The school at Adgaon continues to flourish and a new schoo in another settlement has recently been started at the request of the villagers

"Liberal Tagai advances were made and the settlers are reported to be happy and contented."

Southern Circle.—"Gowlies have been allowed to settle in the Kanara Eastern Division and Northern Division on favourable terms with a view to increase the population and cultivated areas. All the lands demarcated by Mr. Kotwal in Kumta Range were given out on Hangami lease for cultivation pending disforestment. Out of the 13 settlers, who came from Belgaum to Jagalbet (W. D. Kanara), only ten are living there now. Considerable progress has been made this year in Supa Petha by letting out a number of plots for rice and ragi cultivation in 11 more villages involving an area of 80 acres.

"In the Belgaum District such inforest cultivation will be extended as soon as surveyors are available to measure the areas to be given out."

Kumri assignments.

The policy followed in this connection is that Kumri should be maintained where indispensable, otherwise the people should be induced to follow the regular form of cultivation.

In Kanara Western Division fresh Kumri assignments were made by the Divisional Forest Officer personally, in the neighbourhood of Castle rock, in 11 villages involving a total area of about 300 acres. There are still about 12 villages with their hamlets requiring new Kumri assignments and their case is receiving attention.

In Kanara Southern Division, Marathas were granted the concession of growing ragi in areas selected for regeneration with teak. In some cases villagers were also allowed to cut and kumri the strip round their fields and to grow ragi on it.

Utilization Circle.

The following is a note from the Utilization Conservator, Mr. D. A. Thomson, C.I.E., appointed on February 4th, 1920 :—

"Under the orders of Government, the first question taken up was the amount of assistance to be given to the Indian Munitions Board regarding the disposal of surplus stocks of timber and waste material in Bombay, and after a report had been made in the matter, it was decided that the Utilization Conservator should be appointed a member of the Sales Committee. Though nominally in an advisory capacity, it soon became apparent that the work would be more of an executive nature, and I had to pay close attention to all questions in connection with stacking, classifying and selling the timber and waste material in question. After a couple of months of experience of sales to the public and dealers on offer, a system of open auctions was introduced, but as this proved to be a slow method, I got into touch with a firm of brokers so as to hold a series of broker's auctions dealing entirely with the trade ; in the meantime the brokers brought forward two members of a syndicate who were prepared to negotiate for all surplus stocks of timber and waste held by the Indian Munitions Board on a certain date ; this was finally carried through after a series of protracted negotiations which were rendered complicated by the occurrence of a fire at Defence Yard Depot in which Rs. 22,500 worth of teak planks and battens were destroyed.

The whole of the above was of value as it brought the Utilization Branch into touch with the timber trade in Bombay City, and the peculiar conditions attached to the methods of dealing with brokers in the trade and the amount of opposition that the Department might have to meet if direct dealings were started in Bombay.

At the same time, through the kindness of the Director of Industries, I was able to open an office in the portion of old Customs House, and afterwards the New Customs House assigned to him. By keeping in close touch, a great many questions arose in connection with the Industries Branch which had connection with the work of the Forest Department, and these were dealt with in consultation ; this made the Utilization Branch more widely known in Bombay with the result that callers for information on forest questions were numerous. The chief questions which interested callers were the chances of establishing forest industries in or near forest areas—the commonest subjects being in connection with the possibilities of match

making, the destructive distillation of wood and the disposal of charcoal and the by-products therefrom, distillation of power alcohol from mhowra flowers, tanning materials from myrabolans, tarwad, etc., oil from mhowra seed, paper pulp from bamboo and forest grasses, other minor products found in forest and the possibilities of steady supply of timber, sleepers and sawn wood to the Bombay market. Samples of timber were obtained and distributed on request as far as Calcutta and Ceylon, enquirers were also brought into touch with the Department and thereby sales were effected. I have also been informed by the Divisional Forest Officer, North Thana, that the distribution of information in connection with the North Thana coupe sales resulted in a greater degree of competition with the result that higher prices were realized for the coupes as compared with former years.

In addition, close touch was kept with the Railways as continual complaints were being made that sufficient wagons were not being supplied for timber, fuel and charcoal from Guzerat and Thana and was able to secure promises of increased wagon supply whenever possible. The question of relieving Railways of the all rail carriage of coal to Bombay was looked into and reported on along with many other subjects on which reports were called for by the Chief Conservator of Forests, Bombay Presidency.

The writer had also the opportunity of meeting a saw mill expert from home, and with the permission of the Chief Conservator and Government, a visit was made to the Dandeli Saw Mills in N. D. Kanara and a report submitted on the condition of the same along with plans and proposals for an up-to-date general utility mill and dry kiln to the Chief Conservator of Forests. Mr. Rowle's visit was of great value.

A visit was also paid to Marmugao in connection with the acquisition of land for a Government Forest Depôt at Vasco-da-gama, and after a satisfactory interview with the Fiscal Director, proposals in connection with the same were submitted after the close of the year.

In conclusion I beg to express my thanks to the Director of Industries, Mr. Thiselton-Dyer, for his valuable assistance and advice in connection with all questions of engineering which arose when questions of establishment of forest industries were discussed."

CHAPTER VI.

General Remarks.

The effects of the war are being felt in the greatly increased prices as a result of which the cost of all work has risen enormously. A serious check to works was caused by the depletion of labour supply due to the influenza epidemic which was general in 1918 and reappeared in places in a less virulent form in 1919-20 and interfered with Government and contractors' works.

Fodder storage.—A scheme for the storage of a reserve supply of grass for famine years, on the lines indicated in Government Order No. 104 of 13th January 1920, Revenue Department, has been submitted to Government and pending their orders initial steps have been taken for the scheme, which is to provide a reserve of 150 lakhs lbs. at Palghar in North Thana and a similar quantity between Dohad and Godhra in the Panch Mahals.

In the West Khandesh Division the work of storing grass for a fodder reserve was undertaken under the agency of the grass contractor Khan Bahadur V. P. Bhiladwalla. It was the intention to store 50 lakhs lbs. of steam pressed grass at Navapur and 12½ lakhs lbs. of hydraulic pressed grass at each of the places Chinch pada and Khandbara. Unusually heavy rain in January damaged the grass considerably and much of it was rejected as unfit for storage. A further scheme of storing steam pressed grass at Manmad brought from Mandwa in the Central Provinces was under consideration but had not materialized by the end of the year.

Alnavar-Dandeli Forest Railway.—This railway was worked during the year but the freights in the beginning proved too heavy and the traffic was much less than would be required to make it a paying concern. With the reduction of the freights since ordered and the proposed extension of the line to Kirwatti this state of affairs will undoubtedly be remedied, and the forests of Kanara E. D. will be much more fully worked than at present. This extension will probably be taken in hand soon.

Criminal Tribes Settlements.—A settlement at Khanapur, consisting of 345 adults and 107 children, was continued during the year and did useful work in cutting railway fuel. The Divisional Forest Officer suggests that the settlement would be much more useful if it invested in carts and bullocks and took up the carting work in addition. A small settlement was started at Dandeli, where the Berads are doing good work in the Saw Mill.

Financially these settlements are not a success, though they meet the labour difficulty to some extent. But their value to the general public in affording security against crime, by concentration of the Berads in camps under supervision, and to the Berads themselves in weaning them from their criminal propensities and affording them healthy and useful employment, is incalculable.

Government cart Depôts.—These were maintained in Kanara Northern, Eastern and Western Divisions and proved very useful in relieving the difficulties felt by the scarcity of local carts.

Casuarina plantations in Ratnagiri District.—As the question of fuel supply in the district is becoming acute rendering the extension of the tree growth necessary, Mr. D. D. Anantbhat, Extra Assistant Conservator, was deputed to examine the coast and to select areas suitable for Casuarina plantations. He has selected a number of areas totalling over 300 acres. Work has already been commenced in two of the largest plots and the remaining areas will be planted up in course of time by Government or where possible through the agency of the adjoining landowners on easy terms.

Forest policy in Kanara.—Complaints having been received against the forest administration of Kanara Government directed a special investigation to be made into the conditions of cultivation and forest privileges. After the close of the year a Press note was issued defining the policy of Government as regards the Kanara forests and, in addition to maintaining the existing privileges, orders were passed for

(*a*) a free supply of bamboos for the construction of fencing round cultivation,

(*b*) a free supply of stakes for hedging to be allowed from the next year's coupes in certain tracts,

(*c*) the transfer of the control of " bettas " from the Forest to the Revenue Department,

(*d*) an extension of the area of minor forests by about 20,000 acres, and

(*e*) a reduction in the list of reserved trees in minor forests from 25 to 7.

The prohibition against the shooting of wild elephants in the District was removed as they have been found in recent years to be doing serious damage to rice and sugarcane crops in the vicinity of forests.

Forest privileges in Belgaum District.—These were further extended by grant of permission to cultivators of land adjoining reserved forest to extract from the forest within 44 yards of their fields, wood and bamboos for construction of 'mala' or for fencing purposes, provided teak, sandalwood, Sissum, honne and matti are not taken.

His Excellency the Governor of Bombay visited the forests of the Southern Circle in the month of May 1920. During the short stay, he visited some of the Kanara and Belgaum forests, the new railway line and the saw-mill and depôt at Dandeli.

The following extracts are taken from the remarks of the Collectors :—

Northern Circle.—The Collector of Surat (Mr. J. K. N. Kabraji) remarks on the improvement of fire protection, the decrease in the number of animals impounded and the fall in the number of forest offences from 87 to 47. He states " the relations of the Forest Department with the Revenue Department continued satisfactorily and there were no serious complaints from villagers."

The Collector of Nasik (Mr. C. H. Bristow) endorses Mr. Hamilton's remarks on the necessity for good wells in Peint Taluka.

The Collector of Thana (Mr. C. S. Campbell) after referring to the difficult 'labour' position and the outbreak of influenza points out the urgency of the reorganization to improve the prospects of the staff :—

"In the long run a more contended establishment is more or less bound to produce some corresponding benefit to the revenue.

"Allusion may be made to the great need in the district for developing communications.

"The great paucity of officers at the present moment is, of course, a tremendous drawback.

"On the whole Mr. Dalal's reports are a return of hard and conscientious work. He has had a difficult time with influenza, and other adverse circumstances ; but has borne up well throughout. The undersigned is pleased to think that the good work Mr. Dalal has put into both his charges will more than counteract the temporary fall in revenue which that officer anticipates. Mr. Hamilton has written a succinct report, with a good exposition of essentials ; and takes a rosy view of the future.

"The working of the Department has been, of course, harmonious ; and it is a pleasure for a Collector to have officers like Messrs. Dalal, Hamilton and Gilbert to work with."

Central Circle.—(Mr. G. Monteath, Collector of East Khandesh) :—

"Fire protection in the Satpudas was very satisfactory.

"Road alignment goes on but construction is not an easy matter in the Satpudas and it will be a long time before a definitely improved system of roads in this area comes into being, and it will cost much money.

"Mr. Hiley worked hard and toured extensively throughout the year and so did his energetic and capable assistant Mr. Sampson."

Mr. A. M. MacMillan, Collector of West Khandesh :—

"It is useless to try to make any progress unless the whole question is dealt with on a large scale, by the starting of central training schools with a liberal provision for hostels and scholarships, in order that Bhil masters whose mother tongue is Bhili can be trained.

"When all is said and done, to most subordinates the Akrani must be a penal station, on account of its unhealthiness, its being so far out of the way, its lack of all conveniences in the way of bazars and of any sort of social life.

"For the proper man it is by far the most interesting part of this district. Among subordinates the men who can appreciate that side of it are very difficult to find.

"*Raisingpur.*—Although Ralsingpur is more of a penal settlement than Dhadgaon in every way, climate, unhealthiness and loneliness Mr. Gupte has taken up his work in the right spirit and has shown most praiseworthy keenness in all branches of his duties.

"The present arrangement by which Raisingpur estate is managed by the Forest Department is a very great improvement on the old one and is well worth the additional expenditure which it has involed. Forest administration is of course greatly improved, a good start has been made in the settlement of the cleared coupes, the improvement of roads, and the clearing and improvement of the headquarters village of Raisingpur.

"Mr. Bourke has devoted special interest and attention to the affair of Raisingpur and the Akrani, and has made a great many suggestions as to methods of development and policy which I hope it will be possible to give effect to."

Mr. R. G. Gordon, Collector of Kolaba :—

"The proportion of cases undetected in the case of the first two classes is disappointing. It might be thought also that cases of 'felling' which must be deliberate contravention of forest rules required more prosecutions and 'fire' less when the latter is stated to be usually accidental.

"The firewood depôts continued to work well apparently, but even with the large supply of firewood this year complaints were rife at the end of the hot weather that the amount allotted was insufficient for Alibag town.

"The continued cutting of trees in *Malki* lands noted is undoubtedly a serious problem. I am told that very large numbers of Mhowra trees have been cut in Panvel and Karjat talukas. The people will suffer for it later on, but are reckless and unable to visualise the future. I think that the Divisional Forest Officer might next year refer to the results, if any, of the inclusion in protected forest of the Gurcharan areas mentioned in Government Resolution No. 1963, dated 23rd February 1907, Revenue Department, and managed by the Revenue Department.

"As regards free grants village fires have been even heavier this year and the grants continue to increase. The fires are due to the carelessness of the people and their habit of piling rice straw on the roofs of their houses which catches fire like tinder in the hot weather and soon spreads the flames over a whole village.

"Labour is the difficulty in this district, for what with the Bombay market and the operations of the Tata Company, now to be swelled by those of the Khopoli Land Company, it is utterly impossible to get men for forest duties in any way reliable without considerably enhancing their remuneration."

Southern Circle.—(Mr. J. R. Hood, Collector of Kanara):—

"*N. D., Kanara.*—There is substantial improvement in fire protection with a corresponding decrease in the area burnt. There is a close association of rewards with punishment.

"The steady decrease in the number of cattle grazed requires looking into.

"Free removal of bamboos for fencing and provision of grazing grounds near enough to certain village sites or cultivation is calculated to improve the condition of the rayat. The apathetic cultivator requires to be impressed with the necessity of clearing round village sites in the interest of his health and cultivation.

"The labour question is acute."

E. D., Kanara.—(Referring to forest fires):—

"If any success is to be attained there must be no doubt left in the minds of the people about Government being in earnest or any uncertainty of punishment following bad behaviour and, still more important, good behaviour bringing substantial reward.

"It is satisfactory to note that Gavlis have been allowed to settle in this Division on favourable terms with a view to increase man power under Forest control, to promote in-forest cultivation and exploitation of forests in places where forest labour is difficult to obtain.

"Provision of grazing grounds by burning them and eradication of Lantana in certain specified areas would certainly provide for more cattle, revive and promote agriculture, improve public health, reduce cattle trespass and secure better fire protection.

"It is interesting to note that a stout fencing formed of sawn teak slabs has on experiment been found effective to keep pig out of the cross.

"Administration of the Forest Mahals.—In spite of the Forest Department's genuine efforts to ameliorate the condition of the rayats by providing them with all facilities to promote agriculture and improve their general conditions, the Mahals do not appear to show signs of improvement, since the death-rate continues higher than the birth-rate. This requires close looking into. Perhaps, the special officer to be shortly appointed may be able to take up this question of depopulation. The rayats appear to appreciate what is being done for them by the Forest Department."

"*C. D., Kanara.*—It is satisfactory to note that there is a decrease in the number of offences reported. The percentage of convictions to prosecutions is an indication that cases for trial are judiciously selected."

"*S. D., Kanara.*—The year's work in the Southern Division shows signs of improvement."

"The decrease in offences on account of fires and unauthorized felling is satisfactory. The percentage of convictions obtained in prosecutions leaves no ground for complaint. The principle has been to deal leniently with the numerous more or less petty offences and to prosecute in the more serious cases in which the evidence is *prima facie* sufficient to justify the expectation of conviction. The results in the Southern Division afford a good example of its successful working.

"The steady improvement in fire protection is also a matter for satisfaction. No cases of free grazing or monetary rewards under section 277 of Forest Standing Orders are however reported. This association of rewards with punishment would probably secure even better results.

"The results achieved in the plantation of Teak with Ragi by Kunbi Marathas and others are encouraging so far and give hope that the system, if extended on a large scale, may encourage settlements in forest tracts and help to provide the Forest Department with a permanent supply of labour by stopping emigration to neighbouring Mysore Territory."

"*W. D., Kanara.*—It is satisfactory that offences under fire have decreased by 113 with an area of about 3,550 burnt as against 46,516 of the year preceding. This steady improvement in fire protection gives proof of the necessity of close association of rewards with punishments instead of depending too much on punitive measures."

Belgaum.—(Mr. E. G. Laird MacGregor, Collector of Belgaum) :—

"The year has been largely a period of reconstruction and getting things in order after the feverish activity of the war period. Financial results therefore show a falling off, but as explained by Mr. Starte the position is better than it looks.

"The number of fires was about the same, which is disappointing, considering the short fire season this year, but the area burnt shows a welcome drop from 28,770 to 20,802 acres. I have recently fixed the grazing fees for the next season and have agreed to a considerable stiffening of the fees in villages with a bad record. I have consequently received several deputations of protest and sincerely hope that the lectures given them will point out that it does not pay to burn forests.

"Of the treatment of offences it will be noticed that 1,038 were compounded and only 33 taken to Court. This added to the fact that 143 villages and hamlets secured free grazing shows that the Department is not as oppressive as the Native Press alleges.

"*Sylviculture.*—The forests of Khanapur and Belgaum are being overrun by Lantana, and as long as there is no restriction on the planting it in village sites and malki numbers or of allowing it to remain there when self-sown, so long will the forests suffer from its inroads. Kumri—cum—forestry only touches the fringe of the problem. As a matter of fact the villager does not dislike Lantana. It is true that it harbours pig but it is also the main source of the wood ash in which he grows his millets. Every 10 years he cuts down the tangle of Lantana which has grown up in his malki and on that he gets 2 years of crop, to be followed by another 8 years of fallow. It might be possible to replace Lantana by Kumbia (*Careya arborea*) at the time of sowing and go in for cultivation on the *tahal* system."

Darwar-Bijapur Division.—(Mr. A. E. L. Emanuel, Collector of Dharwar) :—

"The number of forest fires was large, and the area burnt was 6,694 acres against 481 of last year. The explanation offered is that there was plenty of grass in the forest which is inflammable and rendered fires possible in spite of the vigilance of the forest staff and co-operation of forest villagers.

"It is gratifying that grazing fees were not enhanced except in one case in which the fees were raised from annas 2 to annas 3. The policy of rewarding villagers for good fire protection by remission of grazing fees was continued.

"The financial results of the Dharwar District show a deficit of Rs. 393, the chief reason being the smaller quantity of sandalwood exploited."

Mr. C. G. Henderson, Collector of Bijapur:—

"The financial results of the year's working appear somewhat disappointing, the surplus for the Bijapur District being only Rs. 2,557, as against Rs. 33,500 for the last year. The fall in revenue was however due to the concession of free grazing, so that what was loss to Government was gain to villagers, and the increase in expenditure was due to a necessary provision of uniforms and to money spent on the propagation of Tarwad, which should be remunerative hereafter.

"The policy of handing over to the Forest Department the management of pasture forests of villages which contain forest proper was carried further during the year. Last year 9,160 acres were so handed over, and now an additional area of over 11,000 acres has come under the management of the Forest Department. The old system of management by village Panchayats was found to be a failure. The system now adopted should be beneficial to the grazing, though it is perhaps doubtful whether the Department with its present establishment will be able to carry out an effective system of periodical closure of different areas for the better preservation of the growth. This would presumably require the co-operation of the villagers and that is always a doubtful factor."

The remarks of the Commissioners on the circle reports are as follows:—

Northern Circle.—(Commissioner, N. D., Mr. J. Ghosal):—

"The year was remarkable for the reaction which set in on the conclusion of the war resulting in a great fall in prices of timber and still more of fuel and so in forest revenues. The prevalence of influenza amongst the staff hindered supervision and detection work and this presumably is the real cause for the general decrease in forest offences and at the same time for the perceptible increase in the number of forest fires. Owing to the paucity of officers important work like the preparation of the preliminary working plans had to be postponed, so also the transfer of the management of Thana gurcharans. There was a noticeable decrease of nearly two lakhs in the number of cattle grazed due to mortality among the cattle in the previous famine. The number of cattle impounded was over thirteen thousand less than in the previous year, the most noticeable decrease being in the Panch Mahals where the figures are 16,050 as against 26,535 in the preceding year. It remains to be seen how far this reduction in impoundings is maintained in view of the explanation given above for the decrease in the number of forest offences.

"2. The preparation of the preliminary working plans had to be postponed due to change of personnel. Even the collection of *data* for a provisional working plan for the Central Dangs was postponed on account of the permanent forest officer going on leave. This reason seems scarcely adequate.

"3. There was unfortunately a marked increase in forest fires. In Panch Mahals this is attributed to the train thieves. This is open to argument. The burning of grass does not make the paths perceptibly easier whilst it certainly makes detection easier.

"4. The suggestion that greater time devoted to sylviculture leaves less time for detection and so to more forest offences deserves serious analysis. The point at issue is to what extent these two neutralize each other. Unless the staff be materially strengthened the good work done by sylviculture might be neutralized by greater denudations elsewhere.

"5. It seems to the Commissioner that contractors are often given extensions without adequate cause. Many have come to look upon this almost as of right. In the report it is stated that scarcity of labour and inadequate communications led to postponements. Communications were no worse than when the contracts were given, so postponements on this ground require explanation.

"6. The greatest need of the Forest Department is no doubt extended communication. Until this is accomplished we can never hope to get decent prices for our produce or exploit the forest properly. The whole forest administration suffer because of this, and it is hoped that substantial grants will be made for such works.

" The Conservator has urged the extension of the Billimora-Kala-Amba line. The Commissioner has already reported on this separately. This line is not likely to solve our problems because of the changes of gauge at Billimora and the unwillingness of contractors to tranship there.

" 7. The Commissioner is glad to note on the perfectly harmonious relations subsisting between the Revenue and Forest Departments. Mr. Hamilton's administration in Thana deserves special commendation. "

Northern and Cenrtal Circles.—(Commissioner, C. D., Mr. F. G. Pratt) :—

" *Forest Areas.*—About 4·7 square miles of forest in charge of the Revenue Department were given out for agricultural purposes in the Poona, Satara, Ahmednagar and Sholapur districts in the Central Circle. In the Northern Circle some afforestments have been made to improve the boundary of North Nasik and some grass Kurans were taken over by the Forest Department in West Khandesh.

" *Demarcation.*—New boundaries over a length of 24 miles were demarcated in Central Circle at a cost of Rs. 179. In the Northern Circle no new work was undertaken owing to scarcity of labour. Only in Nasik District some cairns were erected on afforested areas.

" *Working Plans.*—As regards preliminary plans none were prepared. Peint working plan will be taken up next season. The imperative necessity and importance of appointing a wholetime officer for preparing working plans in the West Khandesh Division was already pointed out last year. It is hoped that the officer will now soon be available, and the unsatisfactory state of affairs removed.

" *Communications.*—The urgent need of the opening up of Peint by road communications and the great increase of revenue which would result are clearly brought out in various passages of the reports submitted. Such roads would on other grounds also be a great boon to this backward tract of country.

" *Forest Offences.*—A statement showing the number and nature of forest offences in the Central Division areas is enclosed. On the one hand, the total number of offences decreased by 16%, the decrease occurring mostly under ' felling ' or ' grazing '. On the other hand, there has been a tremendous increase in the number of ' fires ', *viz.*, 667 as against 226 for the last year.

" The Conservator of Forests, Northern Circle, ascribes both the general decrease in the number of offences and the special increase in fire cases to one and the same cause, *viz.*, sickness among the staff. Owing to influenza the control was not adequate ; also want of vigilance led to the increase in the number of fire offences. The general decrease no doubt is considerably due to the fact that owing to timely rain and consequent good crops the people were busy in their fields, and there was ample fodder for the cattle.

" *Cattle Impoundings.*—From the Conservators' reports, it appears that there was a decrease of 20% in the number of cattle impounded and the decrease is ascribed to two causes, *viz.*, (1) cattle mortality resulting from previous year's scarcity, and (2) the ample grazing. Also the decrease can probably be attributed to the fact that fewer offences were investigated.

" *General.*—The year was so far normal in that a good rainfall was well distributed all over the area. There was, however, a drop in the revenue as the contractors could not remove their material owing to shortage of labour and waggons and as the prices of timber and fuel fell. The Commissioner endorses the Conservator 's opinion that the existing conditions of pay of the clerical establishment afford little prospect of improving the quality of recruit, and that has impaired the discipline of the subordinate staff whose appointments are not attractive, and when threatened with punishment, the men simply go away. The Conservator, Northern Circle, has emphasized the need of the services of a very competent officer to deal with the prevalent inefficiency and corruption in the West Nasik Division. It is a matter for satisfaction that good progress has been made with the schemes for establishing famine reserves of steam pressed grass.

"The Divisional Forest Officer's account of the backward and degraded condition of the inhabitants of the Akrani Mahal is gloomy reading and the Collector's comments are interesting. In this tract as in Peint much may be expected from improved communications. The Conservator, Northern Circle, has called attention to the great need of wells all over the Peint Mahal for improving the quality and quantity of the water supply."

Number of Forest Offences committed in the Central Division during 1919–20.

District	A Cases taken in Court.				B Cases compounded & warned				C Cases undetected.				Total.				Grand Total.
	Injury to forest by fire.	Un-authorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Un-authorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Un-authorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Un-authorized felling.	Grazing without permission.	Other offences.	
East Khandesh ..	4	12	7	3	28	244	420	216	27	81	4	2	59	337	431	221	1,048
West Khandesh ..	3	4	1	2	1	366	216	55	87	71	1	2	91	441	218	59	809
North Khandesh ..	3	13	3	1	23	164	108	65	35	45	..	1	61	222	111	67	461
Poona	2	31	22	6	54	640	625	162	154	51	1	..	210	722	649	168	1,749
Satara	4	23	21	11	17	576	545	134	86	38	..	2	107	637	566	147	1,457
West Nasik ..	3	5	5	..	16	131	157	63	57	21	..	7	76	157	162	70	465
North Nasik ..	1	3	1	..	8	144	164	15	16	24	..	..	25	171	165	15	376
East Nasik ..	..	10	9	..	5	490	288	34	33	25	..	..	38	525	297	34	894
Total..	20	101	69	23	152	2,755	2,524	744	495	356	6	14	667	3,212	2,599	781	7,259
Figures for 1918-1919 ..	19	119	44	21	90	3,682	3,323	907	117	360	26	14	226	4,161	3,393	942	8,722

Central Circle.—(Commissioner, S. D., Mr. L. J. Mountford) :—

"Although there were less fires, the convictions in forest offences rose from 165 to 269; more than ½ of the entire Circle. No remark is made to explain this very large figure and I am asking the Conservator to supply details of the offences of each kind so as to see where a remedy can be applied. If a small district like Kolaba gives 269 offences while large districts like Poona and Satara show some 60 each, there would appear to be something in Kolaba that must be set right.

"2. The Conservator's remarks on the reckless cutting of trees in Malki lands show the prevalence of the evil which I noticed as far back as 1905 when Assistant Collector, Kolaba. Local officers should do their best to persuade the people to preserve their trees in warkas lands while as regards gurcharan it would seem advisable to include it as Protected Forest as proposed by the Conservator.

"3. The labour difficulty in Kolaba is very acute."

Southern Circle.—(Commissioner, S. D., Mr. L. J. Mountford) :—

"1. The labour problem continues to be acute and contractors' rates had consequently to be raised. This emphasises the importance of the introduction of labour saving devices. The percentage of surplus to gross revenue rose from 22·0 to 24·6. The total revenue fell from Rs. 32,35,937 to Rs. 28,84,563. The decrease of nearly 3½ lakhs is due to the fact that the income last year was increased by some 10 lakhs from the Munitions Board. An increase in the estimated value of material on hand testifies to the large amount of work done by the Department on the whole, though the outturn by departmental agency was disappointing.

"The net income has not attained the average of the period 1913-18 which was 38·0 per cent. Until saw mills are well established under proper management, methods of exploitation improved and communications developed, no large increase in the net income is anticipated.

"2. *Saw Mills.*—Saw mills turned out on the whole a fair amount of work, but the mills at Dandeli again did not come up to expectations. This is due to lack of expert management. The total value of the outturn of the mills rose from Rs. 1,98,558 to Rs. 2,42,006. Dandeli mills increased their output slightly from

Rs. 1,29,206 to Rs. 1,37,635. The Commissioner has elsewhere made a suggestion that saw mills should be centralised at Alnavar which is suitable as there is land available; it is at the Rail Head and it is more healthy than other mill localities and thereby will suffer less from lack of labour. Centralised mills can afford adequate expert supervision which the present scattered mills lack. The traffic on the Alnavar Dandeli Railway with its proposed extension will be more economical as logs from Kirwatti, etc., will not require to be unloaded half-way at Dandeli. This proposal is not intended to eliminate entirely isolated saw mills where a locality is specially favourable.

The proposed Dandeli Forest Division when sanctioned will lead to better management of the saw mills and Dandeli Depôt. With concentrated mills which would make a strong and expensive establishment possible, we could undertake other important work such as the manufacture of 3 ply wood or private enterprise could take it up in the vicinity of the Mills; while Alnavar being on the Railway line, the new Forest College at Dharwar would be able to utilise the centre for practical instruction and when a Research Side is added, wood seasoning and other experiments could be carried out there. In a word, Alnavar would be most useful not only for saw mills, but as a Forest enclave for demonstration and experimental work and it is only 22 miles by rail from Dharwar.

3. *Communications.*—Progress in road construction increased. The total expenditure on new works alone rose from Rs. 86,102 to Rs. 2,28,590. It is a matter for regret that money provided by Government for this purpose had to be returned for want of staff which is quite inadequate for the heavy work entailed. The Commissioner has suggested to the Chief Conservator that though there is a dearth of officers now, road and tramway schemes should be investigated as opportunity occurs and plans, etc., kept ready. He has asked the Executive Engineer, Belgaum, to prepare plans and estimates of a certain road in the Belgaum district.

Mr. Pipe, the Forest Engineer, went on leave at the end of the year: the Conservator states that he has planned sufficient work to be executed in his absence. Mr. Pipe's energy is as commendable as his experience of Forest conditions is invaluable.

Until 2 permanent Engineers for the Southern Circle proposed by Government are sanctioned, we must be content with the present rate of progress.

High freight diminished the traffic on the Alnavar Dandeli Railway. The reduction of freight from Rs. 5 to Rs. 1-8 sanctioned by Government and the proposed extension up to Kirwatti will greatly facilitate transport and also pay for the upkeep of the Railway.

The scheme for a timber pond at Vasco-da-Gama is under consideration of Government. This will facilitate export from Kanara forests with the aid of the Alnavar Dandeli Railway and its proposed extension and this trade is expected to assume considerable proportions, especially as the value of the Indian exhibit has been recognised as the outstanding feature of the Timber Exhibition held in London. The price of timber has risen 300 per cent. at Home which will repay heavy expenditure.

4. Preparation and revision of Working Plans are in arrears as usual and no officer could again be spared for the work during this year. The revision of the Working Plans in Kanara N. D., E. D. & W. D. is of the utmost importance in view of the proposed extension of the Railway and their delay will cause serious embarrassment.

5. *Grazing.*—Decrease in impoundings is satisfactory. In Bijapur-Dharwar increase is probably due to the year closely following upon a famine year. It is hoped that the transfer of the grazing lands in Badami Taluka from the R. D. to F. D. will improve the grazing in that tract under more suitable regulations.

In Kanara E. D. praiseworthy efforts were made to cut tree growth and to eradicate lantana from grazing lands with a view to improvement in grazing. I have asked for firing of grazing grounds under control to improve them as they are much overgrown. Incidentally this will diminish the number of forest fires which are unfortunately inevitable where the people desire early grazing.

6. *Fires.*—There is a decided improvement in fire protection. The Conservator considers it doubtful whether there has been any change in the attitude of the people in this matter. Though there are no clear indications pointing either

way, the Commissioner thinks that the result is in a large measure due to the association of rewards with punishments and he is gratified to see that his efforts have begun to bear fruit. More care is still required in scrutinising cases before penal rates are inflicted although the Commissioner admits that with their mass of works, Divisional Forest Officers cannot go minutely into the details of all reported fires until they have assistants to relieve them, and some injustice is caused which is bound to react unfavourably on Forest Conservancy.

As regards the policy in dealing with fires the Commissioner considers, apart from the question of rewards, that two essentials are necessary. The first is to secure a satisfactory record of those who assisted and of those who could, but did not assist. In two cases the Commissioner has found on enquiry that those who assisted were not mentioned and penal rates were imposed on them ; a mistake that was subsequently remedied on his enquiry. His order that *Dakhalas* should now be given will enable such mistakes, which create a bad feeling and destroy all incentive to co-operation, to be avoided in future. In another enquiry which he held, he found a large number of villagers were actually absent from the village, and yet were penalised. As regards punishment for fires he issued the following orders to the Collector of Belgaum in January last:—

> " As regards prosecutions under the amended section I consider that prosecutions should be undertaken with the greatest caution, otherwise they will arouse resentment and the result will be more firing. Often the cultivator lives at a considerable distance from the fire. It may break out 2 miles or more away. It must be remembered that a fire started will get beyond control in the high grass patches of Khanapur in a short time : often the jungle undergrowth is so dense that people actually cannot get at a fire even if they want to and the prosecution therefore should only follow if it was possible to get at the fire and if the people who are often scattered in their fields at a distance would with reasonable activity and intelligence be able to try to put out the fire. *Lex non cogit ad* impossible. Again, the information that is laid against certain cultivators depends usually on a Forest guard and does not come from a reliable source. On the whole therefore the Commissioner prefers rewards to punishments.
>
> " I desire the policy laid down in the Government Resolution referred to (Government Resolution No. 6390 of 7th June 1918) to be followed with energy, *i.e.*, that those who assist must be rewarded : even if the forest is burnt down in spite of their efforts. This is the policy in Kanara."

These orders were passed as rayats at many villages in Kanara told the Commissioner they were afraid they would be punished indiscriminately under the new Law whether they knew of the fire or not and they complained that this would be grossly unfair. They pointed out that the forests of their village were often several miles away from their isolated *wadis* in the valleys and they would often know nothing of them.

The second essential is an enquiry where fires are intentional, as to the motive. Is it because there is some hostility or because there is a real need ? If the former, it would be well to see whether some subordinate is not making himself obnoxious or whether some order has operated harshly : if the latter it should be ascertained what the need is. It might be because the jungle is thick near cultivation and firing was intended to destroy cover for wild animals, or that there is insufficient grazing and the fire was intended to produce better grazing or that grazing grounds are badly overgrown and must be cleared if any grass is to be grown. When a fire is punished the matter should not stop there. The reason should be ascertained if possible.

The recent enquiry made by the Commissioner whether section 207 (last paragraph) of the Standing Orders of the Forest Department was observed showed that the rule was not adhered to in certain cases thereby causing hardship to village grazing, and he has issued an order that such areas should not be closed without making adequate provision for grazing in future.

In order to minimise the danger to forests in a dry year, the Commissioner suggested to the Conservator the desirability of widening fire lines. The Conservator reported that though this suggestion could not be carried out during the year for scarcity of labour, the matter will be attended to. Mr. Edie however states that fire lines are of little use except along roads and paths. I consider that as last year nearly $\frac{1}{7}$th of the forest was burnt, the question whether fire lines are serving their purpose is one that might repay enquiry.

7. *Needs of the Department.*—The Commissioner commented last year on this point and it would be unnecessary to dwell on it here again. However, it may be noted that the difficulty and expense of extraction which depends upon bullocks and carts are increasing everyday and the only remedy is some mechanical method of extraction. The method of extracting timber as described in "Lumbering in Canada" by Mr. Gibson, Bengal Forest Service, is receiving the attention of the Forest Department.

8. *Kumri.*—The assignment of kumri in Supa Petha was taken in hand by Mr. Sothers. He could not devote sufficient time for this work as he had charge of two divisions, and the Collector reports that about 20 villages remain to be settled. The total area assigned is estimated at 300 acres. In accordance with the policy initiated by Mr. Marjoribanks (which was subsequently approved by Government in G. O. No. 2748 of 27-9-1920 an area amounting to 80 acres was also given out by Mr. Sothers for extension of rice cultivation side by side with the grant of kumri. The area is given on temporary lease but if found to be permanently required it will be disforested later. This appears to be the best method whereby the old destructive method of kumri can be gradually and smoothly eliminated from the Petha.

In the Belgaum Division the Divisional Forest Officer has given out a good deal of land for inforest cultivation to kumriwallas whose temporary kumri was resumed last year. The area which is considerable could not be measured for want of staff. That actually measured till the end of the season amounts to about 400 acres. I have inspected several of the assignments: a few are on small hill slopes which should be avoided in future. Special arrangements have been made for measurement during next season.

9. *Population and inforest cultivation.*—Little progress has been made in this matter. The importation of gowlis on special terms in Kanara E. D. will assist in attracting permanent settlers. The 'toungya' system of teak culture adopted in Kanara S. D. will be welcomed by Kumri marathas as the system allows cultivation of ragi and will retain them on the land.

Clearing of village sites.—In order to improve sanitary conditions of villages, the Conservator was asked to arrange to clear considerable areas round selected villages. Measures have already been taken round Nagargali (where 50 acres were cleared) and in Supa, Kumbharwada, Virnoli, Sambrani, Manchikeri, Phansoli, and Gavegali. In Yellapur town which is most unhealthy on account of dense undergrowth and the close proximity of forest, a large area has been clear-felled and is to be allotted as a grazing ground. Lantana and rank vegetation have been removed in about $\frac{2}{3}$rds of the area under Government control, while the inhabitants have been induced to clear their areas half of which has now already been done. In the Supa Petha the resident population is too scanty to keep these areas clear, permission has therefore been given to the villagers of Mirvalli, Joida & Ulvi to kumri the belt. This appears to be the only method whereby the desired object can be achieved in the Petha. Progress has necessarily been slow in the matter as there is fear of dense lantana taking charge as has actually occurred in the cleared areas at Sambrani & Virnoli. It is of little use to clear areas round villages unless the people will keep them clear.

Provision of pure drinking water in malarial parts.—This subject received Commissioner's attention. Owing to the financial stringency, the full amount of Rs. 10,000 applied for by the Collector of Kanara for this purpose could not be sanctioned. The amount of Rs. 3,000 sanctioned will be utilised. The Special Officer newly appointed will give attention to this matter.

Inforest cultivation in Supa Petha.—Of the 13 families which settled at Jagalbet, 4 left the village. The remaining 9 have cultivated 14 acres allotted to them and also some lands of private owners.

10. *Land Revenue Administration of Forest Mahals.*—The two Mahals created in Kanara S. D. could not be taken charge of for paucity of Forest officers.

The Collector reports that—

> "In spite of the Forest Department's genuine efforts to ameliorate the condition of the rayats by providing them with all facilities to promote agriculture and improve their general conditions, the Mahals do not appear to show signs of improvement, since the death-rate continues higher than the birth-rate. This requires close looking into. Per-

haps, the Special Officer to be shortly appointed may be able to take up this question of depopulation. The rayats appear to appreciate what is being done for them by the Forest Department."

I consider that the high death rate is due to the villages being surrounded by Forest, but perhaps even more owing to the very bad water supply, as has already been noted in the Settlement Report of the Supa petha. The Collector will be asked to pay special attention to the water supply question. Government has already in their Resolution No. 4709 of 1900 directed the Collector to pay special attention to the Supa Tract.

11. *Kanara Forest matters.*—For about 2 months last season the Commissioner was engaged in investigating Forest questions on the spot and ascertaining actual needs by personal enquiry at various camps. As a result of his enquiry he submitted certain proposals to Government which have been sanctioned and a Special Officer appointed to work them out.

In addition to this he issued orders to the Collector in several matters to give effect to the orders already passed by Government. The Commissioner's action may be summarised as follows :—

(1) *Afforestation Policy.*—This required a change. Forest officers now agree that further afforestation should be stopped except where there is valuable timber that can be exploited, which has been my policy since 1916. What is wanted is an increase in the cultivated area in order to support the population instead of leaving them, above ghats, practically starved.

As a result of the Commissioner's policy, proposals for the afforestation of ten thousand acres were finally dropped. At the same time, the Commissioner has laid stress on the fact that whenever a waste survey number is found to contain valuable forest growth and is not required for grazing, the advantage should not be lost sight of.

With a view of extending cultivation without prolonged delays, orders have been passed that land outside the demarcation line which is suitable for cultivation and which does not contain valuable timber should at once be given out without consulting the Forest Department. He has also instructed the Special Officer fully on this important point. Unless it entails the sacrifice of material forest interests, the needs of cultivation must be considered paramount.

(2) *Demarcation of strip round cultivation.*—As a result of continued efforts in this matter the concession, of which few were aware in 1916, has been made widely known to cultivators. There is little demand for this strip above ghats except for Ragi cultivation for which it is not primarily intended, although cultivation is allowed with the Collector's permission under Government Resolution No. 1550 of 1910. The area demarcated in the four talukas of Karwar, Ankola, Haliyal and Yellapur and the Mundgod Petha amount to over 10,000 acres. This is chiefly land near the coast where there is no heavy forest at all and the grant by the late Collector was not strictly justified, but if the people will use much of the strip for hadis, there will be a considerable advantage and the Collector's action can be considered as carrying out Government orders in assigning individual hadis.

In order to make the strip more useful to the agriculturists the Commissioner has submitted certain proposals to Government which would wholly transfer the control over the strip from the Forest Department to the rayat, and enable him to use it as agricultural storehouse thereby relieving his demands on the forests. This will make the strip more popular above ghats, where at present the people decline to keep it clear of undergrowth, unless they are allowed to burn and cultivate. As cultivation would only be for 2 years while it would be fallow for 5 to 10 years, it would soon be overgrown by lantana which is the best possible cover from the point of view of wild animals. Mr. Hodgson however is of opinion that 2 years' thorough cultivation would eradicate lantana for good.

(3) *Destruction of wild animals.*—As a preventive measure against damage to crops by wild animals the Commissioner has in consultation with the forest department encouraged hunting of pig in Reserved forest by means of village drives under the supervision either of the Firka Committees or the Patil or a Forest officer and also issued instructions for free issue of gun licenses. The Firka Committees or the Patil might possibly be able to collect the people and organise drives. An individual could do little to discover pig by himself. While not hoping to achieve much in

this direction it is hoped that the measures will gradually lead to combination among cultivators. As guns were scarce efforts were made to supply guns from Dharwar. Experiments in trapping pig are also undertaken and the result is being watched. The figures of pig killed reported up to date are only 282 by netting and trapping and 131 by shooting.

Certain areas in the below ghat part of the District have been released for free and unrestricted shooting of pig in forest and the Conservator's proposal to exclude from the Game Rules the Talukas of Sirsi, Siddapur, Kumta, Honawar and Bhatkal Petha are under consideration.

Rewards for killing pig have been revived under Government orders and proposals for doubling the rate of rewards are before Government.

One of the easiest means within the reach of the cultivator of preventing damage by pig and one which they recommended themselves to the Commissioner is good fencing for which fencing materials are now given free from minor forest and next year's coupes.

Elephants.—These have been excluded from protection allowed under the Game Rules in Kanara under recent orders of Government and application of these orders to Belgaum are under consideration as immense damage is done to the villages near Astoli and Nagargali where villages have been wholly deserted and valuable lands carefully terraced thrown up on account of the ravages of elephants.

(4) *'Soppu' supply.*—In order to improve soppu supply the Agricultural Department is making experiments which are being conducted in the Kumta Agricultural Farm. An area of 169 acres 11 gunthas has been placed at their disposal for this purpose.

Extension of minor forests especially on the coast in order to supply the wants of agriculture is one of the items for investigation by the Special Officer. At a discussion with the people where the Commissioner and Collector were present, it was arranged to allow cutting of soppu of all reserved trees in minor forests except of teak, blackwood, sandal, hirda, khair and ebony, and to extend the period of cutting by one month. These concessions are permitted by the rules sanctioned under Notification No. 5797 of 9th June 1916.

(5) *Cultivation.*—During his tour the Commissioner noticed that agriculture in Mundgod was rapidly diminishing. In order to check its decrease, the Commissioner has directed that bamboos for fencing which the people urgently wanted should be given free. The establishment of an Agricultural Farm which many villages have asked for is also under consideration, as there are large areas of good land available.

(6) *Fuel for gul making.*—For satisfying the needs of the coast villagers experimental depots are proposed to be opened during the next season in Karwar Taluka.

It is hoped that these measures will remove some of the great difficulties of the cultivators of Kanara.

12. *General.*—Measures for destruction of lantana are under consideration of Government. In Belgaum the Divisional Forest Officer gave out 238 acres of overgrown Forest land for kumri cultivation in order to get rid of this pest. This method is worth being tried and its results will be watched especially as Mr. Hodgson considers 2 years cultivation will prevent all aftergrowth of lantana.

Cultural operations.—At the Commissioner's suggestion the possibility of growing casuarina plantations in Ratnagiri has after a long correspondence at last been investigated, and it is hoped to start 2 plantations of 50 acres each to begin with. The future requirements of Bombay must be anticipated and the best possible means is casuarina plantations.

On enquiry from the Commissioner, the Conservator stated that the total area 19,629 acres given in the last year's Form No. 18 was incorrect and that the correct area should be 16,523 acres under the following heads:—

I.	Casuarina plantations	13
II.	Artificial regeneration of teak	597
III.	Assisting natural regeneration	15,913

In this year's Form No. 18, however, only figures under I and II above have been given but not those under III. The reason is being inquired into.

Artificial regeneration of teak and casuarina during the year was 1,064 acres against 610 of the last year. Much more remains to be done. Compared with the area burnt our area of regeneration is very small.

The Forest Department has been very short handed. Charges have been doubled and the work that a Divisional Forest Officer now has to preform is more than any one officer, even the most industrious, can ever hope to get through. The Department has supported this ever increasing burden without complaint but the effects have been felt and several officers have overworked themselves to the verge of a break down. It is very necessary that each Divisional Forest Officer should have an European Assistant capable of enduring the hardships of Forest life. Excellent work has been done by Mr. Pipe as Forest Engineer and it is hoped that he will return to the Forest Department until the Forest Engineers are conversant with the conditions and limited resources of Kanara. The danger of Americanising our methods has to be guarded against. What may be suitable for working a big stand of Oregon Pine or Douglas Fir many square miles in extent may prove too expensive an outlay where our valuable species are not standing thick and close in a homogeneous tract, but are scattered among a number of indifferent species over rough contoured country.

The Commissioner desires to acknowledge the invaluable assistance always most readily and cordially extended to him by Mr. Copleston with his very wide experience of Kanara conditions. As Conservator, Southern Circle, Mr. Edie has carried out his duties with conspicuous success and the Commissioner in conclusion congratulates Mr. Copleston and his officers on the year's good work achieved with a very depleted staff.

Sind Circle.—Commissioner in Sind (Mr. J. L. Rieu):—"The Commissioner would again draw attention to the serious understaffing of the Sind Circle. During the year there was only one Imperial Officer serving in the Circle. For a period which now extends to two years the Deputy Conservator has held charge of a Division in addition to his regular duties. This arrangement is seriously detrimental both to the general administration of the Circle and to the working of the Division. The work of inspecting the revenue jungles in the Thar Parkar District, where the constitution of forest reserves is becoming an urgent necessity, has again had to be deferred because the Deputy Conservator was too busy with his double charge to take it up. The effects of the continued absence of Imperial Officers are apparent from Mr. Newman's references to the extremely defective state of conservation of the Upper Sind forests. An additional officer is required to take charge of the working plans branch, the progress of which is being seriously delayed. The Commissioner hopes that with the gradual return to normal conditions it will soon be possible for Government to bring the staff of the Sind Circle up to full strength and to provide it with a due proportion of Imperial officers. The revenue possibilities of the Circle are indicated by the fact that, notwithstanding the adverse conditions under which the department has operated and the existing admittedly defective methods of exploitation, this estate has yielded a net revenue of ten lakhs within the last two years."

APPENDICES

FORM No. 7.—*Area of Reserved Forest, 1919-1920.*

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.									
Panch Mahals ...	Panch Mahals.	212,152	331	...	...	212,152	331	.....	
Surat ...	Surat ...	51,791	81	...	...	51,791	81	.....	
	Dangs (leased).	211,795	331	...	...	211,795	331	.....	
North Thána ...	Thána ...	221,296	346	54	...	221,350	346	8261 / 14-8-1919, 5097 / 19-5-1919.	
West Thána ...	Do. ...	184,847	289	(a) 1	(b) 1	184,847	289	(a) 4980 / 15-5-1919, (b) 14870 / 17-12-1919.	
East Thána ...	Do. ...	293,495	458	...	4	293,491	458	15355 / 31-12-1919, 15356 / 31-12-1919.	
West Násik ...	Násik ...	224,599	351	281	...	224,880	352	9701 / 19-9-1919.	
North Násik ...	Do. ...	331,930	519	(a) 47	(b) 18	331,959	519	(a) 7949 / 1-8-1919, 11995 / 11-11-1919, 14896 / 20-12-1919, (b) 278 / 30-1-1920.	
East Násik ...	Do. ...	189,579	296	(a) 18	(b) 18	189,579	296	(a) 5020 / 16-5-1919; (b) D. O. / 26-1-1920.	
Ahmedabad ...	Ahmedabad	12,032	19	...	...	12,032	19	.....	
	Total, Northern Circle.	1,933,516	3,021	401	41	1,933,876	3,022		
CENTRAL CIRCLE.									
East Khándesh ...	East Khándesh.	511,884	800	...	37	511,847	800	12774 / 25-11-19; 7644 / 28-7-19.	
West Khándesh ...	West Khándesh.	510,194	797	...	125	510,069	797	D. Misc. 318 / 12-3-20; Erratum A. Misc. 1704 / 15-6-1920.	
North Khándesh...	Do.	556,279	869	...	...	556,279	869	.....	
Poona ...	Poona ...	627,774	981	(a) 77	(b) 212	627,639	981	(a) 8699 / 25-8-1919; 8763 / 26-8-19; D. Misc. 656 / 20-4-1920. (b) 14036 / 2-12-1919; D. O. / 23-1-1920; D. Misc. 501 / 15-4-1920; 14396 / 8-12-1919; 14904 / 20-12-1919.	

FORM No. 7.—*Area of Reserved Forest, 1919-1920*—continued.

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	0
CENTRAL CIRCLE—*contd.*									
Sátára	Sátára ...	454,554	710	(*a*) 37	(*b*) 256	454,335	710	(*a*) 8974 / 1-9-1919 ; D. Misc. 679 / 22-4-1920. (*b*) 11653 / 3-11-1919 ; 11654 / 3-11-1919 ; D. O. / 23-1-1920 ; D. Misc. 590 / 5-4-1920 ; Erratum 7431 / 22-7-1919.	
	Do. (leased) ...	468	1	...	...	468	1	.....	
Kolába ...	Kolába ...	289,575	452	...	9— (*c*) 1,328	288,238	450	12222 / 14-11-1919 ; D. Misc. 805 / 14-5-1920. (*c*) Exclusion of area wrongly included in last year's form as having been transferred from Ratnagiri.	
Nagar and Sholápur.	Nagar and Sholápur.	447,811	700	...	956	446,855	698	6807 / 8-7-1919 ; 7561 / 25-7-1919 ; 8973 / 1-9-1919 ; 9386 / 12-9-1919 ; 10727 / 10-10-1919 ; 12219 / 14-11-1919 ; 12220 / 14-11-1919 ; 12221 / 14-11-1919 ; 12223 / 14-11-1919 ; 12534 / 21-11-1919 ; 14037 / 2-12-1919 ; 14343 / 6-12-1919 ; 14669 / 17-12-1919 ; D. O. / 13-1-1920 ; D. O. / 2-2-1920 ; D. Misc. 159 / 4-3-1920 ; D. Misc. 401 / 16-3-1920 ; D. Misc. 536 / 9-4-1920.	
	Total, Central Circle.	3,398,539	5,310	114	2,923	3,395,730	5,306		
SOUTHERN CIRCLE.									
Kánara, N. D. ...	Kánara and Dhárwár.	273,008	427	(*d*) 11	(*e*) 11	273,008	427	(*d*) 6112 / 17-6-1919 ; (*e*) D. Misc. 648 / 15-4-1920 ; 799 / 14-5-1920.	
Kánara, E. D. ...	Do. ...	377,663	590	(*f*) 45	(*g*) 20	377,688	590	(*f*) 11901 / 8-11-1919 ; (*g*) 9718 / 19-9-1919 ; D. Misc. 368 / 13-3-1920 ; 766 / 17-5-1920.	
Kánara, C. D. ...	Kánara ...	500,384‡	782	...	351 *11,745	488,788	764	6114 / 17-6-1919 ; 7477 / 23-7-1919 ; 7478 / 23-7-1919 ; 8433 / 18-8-1919 ; 15320 / 31-12-1919 ; D. Misc. 497 / 24-3-1920 ; 794 / 8-5-1920. * Transferred to S. D. Kánara on 1st July 1919.	
Kánara, S. D. ...	Do. ...	408,946	639	(*h*) 5 †11,715	(*i*) 695	420,001	656	(*h*) 6848 / 4-7-1919 ; (*i*) 7477 / 23-7-1919 ; 8434 / 18-8-1919 ; 11102 / 21-10-1919 ; 9702 / 19-9-1919 ; D. Misc. 495 / 24-3-1920 ; 1449 / 26-5-1920. † Transferred from C. D. Kánara.	

FORM No. 7.—*Area of Reserved Forest, 1919-1920*—concluded.

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
SOUTHERN CIRCLE—*concld.*									
Kánara, W. D. ...	Kánara ...	521,126	814	2	...	521,128	814	10034 / 27-9-1919.	
Belgaum ...	Belgaum ...	437,100	683	176	...	437,276	683	5214 / 22-5-1919; 8381 / 18-8-1919; 11993 / 13-11-1919; 12275 / 15-11-1919; D. Misc. 350 / 6-3-1920.	
Dhárwár-Bijápur ...	Dhárwár and Bijápur	316,045	494	(*a*) 280	(*b*) 102 *50	316,173	494	(*a*) 11902 / 11-11-1919; D. O. / 9-1-1920; D. O. / 24-1-1920; D. Misc. / 25-2-1920; D. Misc 319 / 12-3-1920; D. Misc. 405 / 12-3-1920. (*b*) 5477 / 30-5-1919; 9703 / 19-9-1919; D. Misc. / 31-1-1920; D. Misc. 136 / 5-2-1920; D. Misc. 311 / 6-3-1920; 349 / 6-3-1920; 646 / 17-4-1920. *Error rectified—G. O., R. D., No. 195 of 21st January 1920.	
Ratnágiri ...	Ratnágiri...	12,051	19	...	...	12,051	19	.....	
	Total, Southern Circle.	2,846,823	4,448	519 *11,745	1,229 *11,745	2,846,113	4,447	*Area transferred from Kánara C. D. to Kánara S. D.	
SIND CIRCLE.									
Sukkur ...	Sukkur and Upper Sind Frontier.	213,389	333	+3,821	−1,646	215,564	337		+Gained by action of the river.
Shikárpur ...	Do. ...	115,292	180	+9,544	−18,863	105,973	166		−Lost by action of the river.
Lárkána ...	Lárkána and Nawábshah.	109,768	172	+3,928	+3,912	109,784	171		
Hyderabad ...	Hyderabad, Karáchi and Nawábshah.	158,801	248	+1,463	−6,026	154,238	241		
Karáchi ...	Hyderabad and Karáchi.	142,008	222	+2,166	−3,736	140,438	219	Government Notification No. A Misc.—1336 of 18th May 1920.	*Note.*—The area of kacha lands comprising 717 acres 10 guntas notified under section 19 in the Karachi Division has already been included in Forest on award to the Forest Department.
	Total, Sind Circle.	739,258	1,155	20,922	34,183	725,997	1,134		
	GRAND TOTAL, PRESIDENCY.	8,918,136	13,934	21,956	38,376	8,901,716	13,909		

FORM No. 7-A.—*Area of Protected Forest, 1919-1920.*

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.									
Surat ...	Dángs (leased).	208,013	325	...	...	208,013	325		
North Thána ...	Thána ...	95,488	149	...	10	95,478	149	12937 / 27-11-1919.	
West Thána ...	Do. ...	64,631	101	...	18	64,613	101	512 / 26-3-1920, 6747 / 4-7-1919,	10409 / 6-10-1919, D. O. / 24-1-1920.
East Thána ...	Do. ...	90,785	142	...	13	90,772	142	15354 / 31-12-1919,	15317 / 31-12-1919.
West Násik ...	Násik ...	61,401	96	...	...	61,401	96		
	Total, Northern Circle.	520,318	813	...	41	520,277	813		
CENTRAL CIRCLE.									
Sátára	Sátára ...	658	1	...	...	658	1		
Poona	Poona ...	7,139	11	...	...	7,139	11		
Kolába	Kolába ...	47,229	74	...	28	47,201	74	D. Misc. 255 / 4-3-1920, A. Misc. 1517 / 3-6-1920,	A. Misc. 1355 / 21-5-1920. A. Misc. 1705 / 16-6-1920.
	Total, Central Circle.	55,026	86	...	28	54,998	86		
SOUTHERN CIRCLE.									
Kánara, N. D. ...	Kánara and Dhárwár.	58	.....	...	...	58	...		
Kánara, E. D. ...	Do. ...	1,711	3	...	...	1,711	3		
Kánara, C. D. ...	Kánara ...	32,567	51	294	...	32,861	51	7477A / 23-7-1919	7479 / 23-7-1919
Kánara, S. D. ...	Do. ...	43,979	68	671	...	44,650	70	7477A / 23-7-1919.	
Kánara, W. D. ...	Do. ...	9,028	14	...	...	9,028	14		
Belgaum	Belgaum ...	12	.....	...	...	12	...		
Dhárwár-Bijápur...	Dhárwár and Bijápur.	.....	.....	...	...	...	...		
	Total, Southern Circle.	87,355	136	965	...	88,320	138		
SIND CIRCLE.									
Shikarpur... ...	Upper Sind Frontier.	585	1	...	...	585	1		
	Total, Sind Circle.	585	1	...	...	585	1		
	GRAND TOTAL, PRESIDENCY.	663,284	1,036	965	69	664,180	1,038		

FORM No. 7-B.—*Area of Forest Proper, Reserved or Mixed Fuel and Fodder Reserves under the management of the Forest Department for 1919-1920.*

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.									
Panch Mahál's ...	Panch Mahál's.	212,152	331	...	...	212,152	331		
Surat ...	Surat. ...	463,507	724	...	...	463,507	724		
North Thána ...	Thána ...	221,683	347	54	...	221,737	347	*Vide* Form No. 7.	
West Thána ...	Do. ...	192,652	301	1	1	192,652	301	Do.	
East Thána ...	Do. ...	293,222	458	...	4	293,218	458	Do.	
West Násik ...	Násik ...	220,898	345	281	...	221,179	346	Do.	
North Násik ...	Do. ...	316,166	494	47	18	316,195	494	Do.	
East Násik ...	Do. ...	165,130	258	18	...	165,148	258	Do.	
CENTRAL CIRCLE.	Total, Northern Circle.	2,085,410	3,258	401	23	2,085,788	3,259		
East Khándesh...	East Khándesh.	488,629	764	...	37	488,592	763	*Vide* Form No. 7.	
West Khándesh.	West Khándesh.	396,927	620	...	125	396,802	620	Do.	
North Khándesh.	Do. ...	556,279	869	...	...	556,279	869	Do.	
Poona ...	Poona ...	361,699	565	77 *1,554	20	363,310	567	Do.	
Sátára ...	Sátára ...	330,957	517	37	7	330,987	517	Do.	*Transferred from Pasture to the charge of the Forest Department as per Government Order, Revenue Department, No. 285 of 31st January 1920.
Kolába ...	Kolába ...	270,999	423	...	1,333	269,666	422	Do.	
SOUTHERN CIRCLE.	Total, Central Circle.	2,405,490	3,758	114 *1,554	1,522	2,405,636	3,758		
Kánara, N. D....	Kánara and Dhárwár.	273,066	427	11	11	273,066	427	*Vide* Form No. 7.	
Kánara, E. D....	Do. ...	377,045	589	45	20	377,070	589	Do.	
Kánara, C. D. ...	Kánara ...	533,451	834	(*a*) 294	(*b*) 351 †11,745	521,649	815	(*a*) *Vide* Form No. 7A. (*b*) *Vide* Form No. 7. †Transferred to S. D. Kánara on 1st July 1919.	
Kánara, S. D. ...	Do. ...	452,925	708	(*c*) 676 ‡11,745	(*d*) 695	464,651	726	(*c*) *Vide* Form No. 7 and 7A. (*d*) *Vide* Form No. 7. ‡Transferred from C. D. Kánara on 1st July 1919.	
Kánara, W. D. ..	Do. ...	530,154	828	2	...	530,156	828	*Vide* Form No. 7.	
Belgaum ...	Belgaum ...	435,435	680	176	...	435,611	681	Do.	
Dhárwár-Bijápur.	Dhárwár and Bijápur.	223,390	349	280 (*e*) 7,794	102 (*f*) 613	230,749	361	Do (*e*) Transferred from Revenue Department as per Bijapur Collector's Nos. C-1596 23-2-1920 and C-3 2-6-1920. (*f*) Errors rectified, G. O., R. D., No. 195 of 21st January 1920.	
	Total, Southern Circle.	2,825,466	4,415	1,484 (*e*) 7,794 *11,745	1,179 (*f*) 613 *11,745	2,832,952	4,427	*Area transferred from Kánara, C. D. to Kánara, S. D.	

FORM NO. 7-B.—*Area of Forest Proper, Reserved or Mixed Fuel and Fodder Reserves under the management of the Forest Department for 1919-1920*—continued.

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification or transfer.	Remarks.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
SIND CIRCLE.									
Sukkur ...	Sukkur and Upper Sind Frontier.	213,389	333	+3,821	-1,646	215,564	337		+Gained by action of the river.
Shikárpur ...	Do. ...	115,877	181	+9,544	-18,863	106,558	167		-Lost by action of the river.
Lárkána ...	Lárkána and Nawábsháh.	109,768	172	+3,926	-3,912	109,784	171		
Hyderabad ...	Hyderabad, Nawábsháh and Karáchi.	158,801	248	+1,463	-6,026	154,238	241		
Karáchi ...	Hyderabad and Karáchi.	141,984	222	+2,166	-3,736	140,414	219	A. Misc. 1336 18-5-1920.	The area amounting to 717 acres notified under section 19 in the Karáchi Division has already been included in Forest on award to the Forest Department being kacha lands.
	Total, Sind Circle.	739,819	1,156	20,922	34,183	726,558	1,135		
	GRAND TOTAL.	8,056,185	12,587	22,921 *1,554 (e) 7,794	36,907 (f) 613	8,050,934	12,579		

FORM NO. 7-C.—*Area of Fodder Reserves and Pasture Lands under the management of the Revenue Department for 1919-1920.*

Division.	Civil District or Territory.	Area on 1st July 1919.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1920.		No. and date of Notification of addition or transfer.	Remarks.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.									
Surat ...	Surat ...	8,092	13	...	...	8,092	13		
North Thána ...	Thána ...	95,102	148	...	10	95,092	148	*Vide* Form No. 7A.	
West Thána ...	Do. ...	56,825	89	...	18	56,807	89	Do.	
East Thána ...	Do. ...	91,058	142	...	13	91,045	142	Do.	
West Násik ...	Násik ...	65,102	102	...	...	65,102	102		
North Násik ...	Do. ...	15,764	25	...	...	15,764	25		
East Násik ...	Do. ...	24,449	38	...	18	24,431	38	*Vide* Form No. 7.	
Ahmedabad ...	Ahmedabad.	12,032	19	...	...	12,032	19		
CENTRAL CIRCLE.	Total, Northern Circle.	368,424	576	...	59	368,365	576		
East Khándesh ...	East Khándesh.	23,255	36	...	...	23,255	36		
West Khándesh ...	West Khándesh.	113,267	177	...	...	113,267	177		
Poona ...	Poona ...	273,214	427	...	192 *1,554	271,468	425	*Vide* Form No. 7.	* *Vide* remark in Form No. 7-B.
Sátára ...	Sátára ...	124,723	195	...	249	124,474	195	Do.	
Kolába ...	Kolába ...	65,805	102	...	32	65,773	103	*Vide* Forms Nos. 7 and 7-A.	
Nagar and Sholápur.	Nagar and Sholápur.	447,811	700	...	956	446,855	698	*Vide* Form No. 7.	
SOUTHERN CIRCLE.	Total, Central Circle.	1,048,075	1,637	...	1,429 *1,554	1,045,092	1,634		
Kánara, E. D. ...	Kánara and Dhárwár.	2,329	4	...	...	2,329	4		
Belgaum ...	Belgaum ...	1,677	2	...	...	1,677	2		
Dhárwár-Bijápur.	Dhárwár and Bijápur.	92,655	145	613 (*a*)	50 (*a*) 7,794 (*b*)	85,424	133	(*a*) Errors rectified, Government Order, Revenue Department, No. 195 of 21st January 1920.	(*b*) Transferred to Forest Department, *vide* Form No. 7-B.
Ratnágiri ...	Ratnágiri ...	12,051	19	...	...	12,051	19		
	Total, Southern Circle.	108,712	170	... (*a*) 613	50 (*b*) 7,794	101,481	158		
SIND CIRCLE.									
Karáchi ...	Karáchi ...	24	...	..	...	24	...	Commissioner in Sind's No. 2370 of 4th July 1911.	
	Total, Sind Circle.	24	...	...	...	24	...		
	Grand Total, Presidency.	1,525,235	2,383	... (*a*) 613	1,538 * 1,554 (*b*) 7,794	1,514,962	2,368		

FORM

ABSTRACT OF FORMS NOS. 7, 7-A,

Division.	In charge of the Forest Department.				
	Reserved Forest.			Protected Forest.	
	Forest proper.	Pasture reserves.	Fuel and fodderreserves.	Forest proper.	Pasture reserves.
NORTHERN CIRCLE.	Sq.m.	Sq.m.	Sq.m.	Sq.m.	Sq.m. a.
Panch Mahals ...	331	.....	...	...	.....
Surat ...	399	.....	...	325	.....
North Thána ...	344	.....	2	1	.....
West Thána ...	289	.....	...	12	.....
East Thána ...	458	.....	...	...	.....
West Násik ...	345	.....	1	...	.....
North Násik ...	494	.....	...	...	.....
East Násik ...	256	.....	2	...	.....
Ahmedabad ...	.....	.....	...	...	.....
Total, Northern Circle ...	2,916	.....	5	338	.....
CENTRAL CIRCLE.					
East Khándesh ...	764	.....	...	...	.....
West Khándesh ...	489	.....	131	...	.....
North Khándesh ...	869	.....	...	...	.....
Poona ...	556	.....	...	11	.....
Sátára ...	516	.....	...	1	.....
Kolába ...	417	.....	4	...	.....
Ahmednagar and Sholápur ...	.....	.....	...	...	.....
Total, Central Circle ...	3,611	.....	135	12	.....
SOUTHERN CIRCLE.					
Kánara, Northern ...	425	2	...	...	.....
Kánara, Eastern ...	479	107	...	...	3
Kánara, Central ...	664·37	99·35	...	...	51·34
Kánara, Southern ...	401	255	...	69	1
Kánara, Western ...	753	61	...	...	14
Belgaum ...	630·38	50·23	...	...	.....
Dhárwár-Bijápur ...	316	33	12	...	.....
Ratnágiri ...	.....	.....	...	...	.....
Total, Southern Circle ...	3,668·75	607·58	12	69	69·34
SIND CIRCLE.					
Sukkur ...	337	.....	...	...	.....
Shikárpur ...	166, *i.e.*, acres (165—373)	.....	...	1 sq. mile, *i.e.*, 585 acres	.....
Lárkána ...	171	.....	...	...	.....
Hyderábad ...	241	.....	...	...	.....
Karáchi ...	219	.....	...	...	.....
Total, Sind Circle ...	1,134	.....	...	1 sq. mile.	.....
GRAND TOTAL, PRESIDENCY.	11,330	608	152	420	69

No. 7—D.

7-B AND 7-C FOR 1919-20.

In charge of the Revenue Department.				Total Forest Area.	Remarks.
Reserved Forest.			Protected Forest.		
Forest proper.	Pasture reserves.	Fuel and fodder reserves.	Pasture reserves.		
Sq.m.	Sq.m.	Sq.m.	Sq.m.	Sq.m.	
...	.....	...	...	331	
...	3	10	...	787	
...	.....	...	148	495	
...	.....	...	89	390	
...	.....	...	142	600	
...	4	2	96	448	
...	25	...	...	519	
...	38	...	...	296	
...	.....	19	...	19	
...	70	31	475	3,835	
...	36	...	...	800	
...	177	...	...	797	
...	.....	...	...	869	
...	425	...	...	992	
...	189	6	...	712	
...	29	...	74	524	
...	698	...	...	698	
...	1,554	6	74	5,392	
...	.....	...	...	427	
...	4	...	...	593	
...	.....	...	...	815	
...	.....	...	...	726	
...	.....	...	...	828	
1	.....	1	...	683	
...	133	...	...	494	
14	.....	5	...	19	
15	137	6	...	4,585	
...	.....	...	...	337	
...	.....	...	...	* 167	* The difference of 585 acres of protected Forest has been accounted for in columns 5 and 11.
...	.....	...	...	171	
...	.....	...	...	241	
...	.....	...	...	† 219	† The area comprising 24 acres which is under the management of Revenue Department has been accounted for.
...	.....	...	...	1,135	
15	1,761	43	549	14,947	

FORM No. 8.—*Progress made in Forest*

Forest Division.	Civil District or Territory.	Name of Forest.	AREA IN SQUARE MILES.		
			Finally settled during year.	In hand at commencement of year.	Taken in hand during year.
1	2	3	4	5	6
NORTHERN CIRCLE.					
Reserved Forest.					
North Thána ...	Thána ...	Damkhand ...	1/640	.....	.....
		Shirgaon ...	53/640	.....	.....
West Thána ...	Do.	Gundgaon ...	.....	.....	4/640
West Násik ...	Násik ...	Ambebahula ...	.....	.....	88/640
		Ganga Mahalungi ...	114/640	.....	.....
		Rohili ...	167/640		
North Násik ...	Násik	Agharkhurd ...	.....	12/640	.....
		Jamboti ...	34/640	.....	.....
		Jamshet ...	6/640	.....	.....
		Palasdar ...	7/646	.....	.....
East Násik ...	Do.	Borkhind ...	18/640	.....	.....
		Total, Northern Circle.	400/640	12/640	92/640

Settlements during the year 1919-1920.

Cost during year.		Entire cost per square mile of areas finally settled.	Government Notification of Settlement.		Remarks.
In Forest Accounts.	In other Accounts.		No.	Date.	
7	8	9	10	11	12
Rs.	Rs.	Rs.			
... ..	... ..	.... ..	5097	19th May 1919 ...	Area afforested from 22nd July 1919.
... ..	.....	... ..	8261	14th August 1919.	
.....	.....	.....	1309	15th May 1920.	
.....	.....	... ..	12273	15th Nov. 1919.	
.....	.....	.....	9701	19th Sept. 1919.	
.....	.. ...	.....	15024	11th Dec. 1917.	
.....	.....	.....	7849	1st Aug. 1919.	
.....	.....	.....	11995	11th Nov. 1919.	
.....	... ..	.....	14896	20th Dec. 1919.	
.....	.....	.....	5020	16th May 1919.	
.....	.....	.....	.....	.....	

FORM No. 8—*Progress made in Forest*

Forest Division.	Civil District or Territory.	Name of Forest.	AREA IN SQUARE MILES.		
			Finally settled during year.	In hand at commencement of year.	Taken in hand during year.
1	2	3	4	5	6
CENTRAL CIRCLE.					
Reserved Forest.					
West Khándesh ...	West Khándesh ...	Naoli, etc., 39 villages	.....	1 290/640	.....
		Hingune	.....	22/640	.....
		Haldani	.. ...	.....	85/640
North Khándesh ...	Do. ...	Fattepur	.....	.....	184/640
		Nagzari	... ..	77/640	.....
Poona	Poona	Vadgaon Rasai and 2 others.	77/640	.....	.....
		Agalambe	.....	.....	57/640
		Ghera Singhar ...	.....	.....	17/640
		Walke	.....	41/640	35/640
	Ahmednagar	Sarola Pathar	.....	.....	3/640
Sátára	Sátára	.....	37/640	26/640	205/640
Kolába	Ratnágiri	Kongla	.....	...	4/640
		Apta, etc. ...	.....	2 433/640	.....
	Total, Central Circle ...	.....	114/640	4 249/640	590/640

Settlements during the year 1919-1920—continued.

Cost during year.		Entire cost per square mile of areas finally settled.	Government Notification of Settlement.		Remarks.
In Forest Accounts.	In other Accounts.		No.	Date.	
7	8	9	10	11	12
Rs.	Rs.	Rs.			
.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	
.....	.....	.....	D. Misc. 351	10th March 1920.	
.....	.....	.....	D. Misc. 387	9th March 1920.	
.....	.....	.....	.....	.....	
.....	.....	.....	8699 8763 D. Misc. 656	25th August 1919. 26th August 1919. 20th April 1920.	
.....	.....	.....	D. Misc. 724	26th April 1920.	
.....	.....	.....	D. O. ...	17th January 1920.	
.....	.....	.....	8700	25th August 1919.	
.....	.....	.....	D. Misc. 589	10th April 1920.	
.....	.....	.....	8974 D. Misc. 679 9719 10945	1st Sept. 1919. 22nd April 1920 19th Sept. 1919. 17th October 1919.	
.....	.....	.....	D. Misc. 530	26th March 1920.	
.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	

FORM No. 8—*Progress made in Forest Settlements*

Forest Division.	Civil District or Territory.	Name of Forest.	Area in square miles.		
			Finally settled during year.	In hand at commencement of year.	Taken in hand during year.
1	2	3	4	5	6
SOUTHERN CIRCLE.					
Reserved Forest.					
Kánara, Northern...	Kánara and Dhárwár ...	Reserved Forest ...	11/640	203/640	101/640
Do. Eastern ...	Do. ...	Do. ...	45/640	54/640	10/640
Do. Southern...	Kánara ...	Do. ...	5/640	1/640	27/640
Do. Western ...	Do. ...	Do. ...	2/640	.....	.....
Belgaum	Belgaum ...	Do. ...	176/640	102/640	14 538/640
Dhárwár-Bijápur ...	Dhárwár and Bijápur ...	Do. ...	280/640	448/640	147/640
	Total, Reserved Forest ...	.....	519/640	1 168/640	15 183/640
Protected Forest.					
Kánara, Central ...	Kánara ...	Protected Forest ...	294/640	.....	.....
Do. Southern ...	Do. ...	Do. ...	1 31/640	.....	.....
	Total, Protected Forest ...	.....	1 325/640	.....	.....
	Total, Southern Circle ...	.....	2 204/640	1 168/640	15 183/640
SIND CIRCLE.					
Sukkur ...	Sukkur ...	Reserved Forest ...	.....	.....	40 479/640
Karáchi ...	Hyderabad and Karáchi	.....	1 77/640	.....	38 18/640
	Total, Sind Circle ...	.....	1 77/640	.....	78 497/640
	Grand Total, Presidency...	.....	4 155/640	5 429/640	95 82/640

during the year 1919-1920—continued.

Cost during year.		Entire cost per square mile of areas finally settled.	Government Notification of Settlement, Number and Date.		Remarks.
In Forest Accounts.	In other Accounts.				
7	8	9	10	11	12
Rs.	Rs.	Rs.	Under Section 19.	Under Section 4.	
2,270	...	...	6112 / 17-6-19	8430 / 18-8-19 ; D. Misc. 647 / 15-4-20	
...	...	...	11901 / 8-11-19	8431 / 18-8-19 ; 8432 / 18-8-19	
168	...	...	6848 / 4-7-19	8380 / 18-8-19	
117	...	...	10034 / 27-9-19		
...	...	...	5214 / 22-5-19 ; 8381 / 18-8-19 ; 11993 / 13-11-19 ; 12275 / 15-11-19 ; D. Misc. 350 / 6-3-20 ;	6850 / 8-7-19 ; 8698 / 25-8-19 ; 8835 / 27-8-19 ; 9114 / 4-9-19 ; 9700 / 19-9-19	
200	...	...	11902 / 11-11-19 ; D. O. / 8-1-20 ; D. O. / 24-1-20 ; D. Misc. / 25-2-20 ; D. Mis. 319 / 12-3-20 ; D. Misc. 405 / 13-3-20 ;	14457 / 9-12-19 ; 12484 / 20-11-19 ; D. O. / 27-1-20 ; D. Misc. 477 / 19-3-20 ; D. Misc. 478 / 19-3-20 ; D. Mis. 646 / 17-4-20 ;	
2,755	...	...	Under Section 28.		
...	...	...	7477-A / 23-7-19 ; 7479 / 23-7-19		
...	...	...	7477-A / 23-7-19		
...	...	...			
2,755	...	...			
...	...	...		7988 / 5-8-19 ; 9168 / 5-9-19 ; 12391 / 19-11-19 ;	
...	...	...	A. Misc. 1336 / 18-5-20	8056 / 7-8-19 ; 8057 / 7-8-19 ; 10410 / 6-10-19 ; 10410 A to L / 6-10-19 ;	
...	...	...		D. Misc. 341 / 10-5-20 ; A. Misc. 1355 / 10-5-20 ; D. 6 / 23-1-20	
2,755	...	...			

FORM NO. 9.—*Record of Demarcation and Maintenance of Boundaries, 1919-1920.*

Division.	Length of Boundaries artificially demarcated during the year.	Length of previously existing Boundaries repaired.	Length of previously existing Boundaries not repaired.	Total length of artificially marked Boundaries at the close of the year.	Length of Boundaries still to be demarcated at the close of the year.	Length of natural Boundaries not requiring artificial marks.	Total length of Boundaries at the close of the year.	Expenditure on Demarcation during the year.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. a. p.	Rs. a. p.	
Panch Mahals ...	.....	959	.....	959	.....	101	1,060	.....	31 0 0	
Surat ...	.....	835	.....	835	.....	103	938	.....	84 0 0	
North Thána ...	.....	911	.....	911	.....	34	945	.....	581 0 0	
West Thána ...	.....	736	.....	736	.....	32	768	.....	480 0 0	
East Thána ...	.....	1,393	.....	1,393	39	141	1,573	.....	140 0 0	
West Násik ...	.....	1,538	.....	1,538	64	193	1,795	.....	587 0 0	
North Násik ...	.....	1,245	.....	1,245	2	73	1,320	.....	231 0 0	
East Násik ...	.....	717	.....	717	.....	59	776	.....	61 0 0	
Total, Northern Circle ...	.....	8,334*	.....	8,334	105	736	9,175	.....	2,195 0 0	*The entire length of forest boundaires was gone over, but repairs were confined to the setting right of all dismantled cairns and painting red or white of all cairns according as they were required to indicate closed or open areas.
CENTRAL CIRCLE.										
East Khándesh ...	.....	2,183	.....	2,183	.....	107	2,290	.....	77 0 0	
West Khándesh ...	.....	843	.....	843	.....	67	910	.....	147 0 0	
North Khándesh ...	.....	309	.....	309	.....	52	361	.....	176 0 0	
Poona ...	22	3,332	.....	3,354	.....	442†	3,796	116 0 0	312 0 0	†It was found necessary to demarcate 9 miles of boundary between Bhor State and Government Forests. Hence difference from last year's figures.
Sátára ...	2	15	4,237	4,254	.....	80	4,334	63 0 0	474 0 0	
Kolába ...	.....	1,989	.....	1,989	11	72	2,072	.....	274 0 0	
Total, Central Circle ...	24	8,671	4,237	12,932	11	820	13,763	179 0 0	1,460 0 0	
SOUTHERN CIRCLE.										
Kánara, Northern ...	.....	1	623	624	.....	14	638	.....	2 0 0	
Do. Eastern ...	6‡	261	1,302	1,569	.....	31	1,600	262 0 0	1,360 0 0	‡Demarcaton on account of revision of bettas. §Decrease in Central Division Kánara and increase in Southern Division Kánara are due to transfer of 18 square miles of Forests from the former to the latter division. Change of figures in columns 5 and 8 is due to fresh measurement of the boundary line.
Do. Central ...	30‡	.....	3,474	3,504	.....	96	3,600§	57 0 0	.....	

FORM No. 9.—*Record of Demarcation and Maintenance of Boundaries, 1919-1920*—concluded.

Division.	Length of Boundaries artificially demarcated during the year.	Length of previously existing Boundaries repaired.	Length of previously existing Boundaries not repaired.	Total length of artificially marked Boundaries at the close of the year.	Length of Boundaries still to be demarcated at the close of the year.	Length of natural Boundaries not requiring artificial marks.	Total length of Boundaries at the close of the year.	Expenditure on Demarcation during the year.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—*concluded.*	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. a. p.	Rs. a. p.	
Kánara, Southern ...	.....	31	4,768	4,799	.....	112	4,911*	.....	111 0 0	* Decrease in Central Division Kánara and increase in Southern Division Kánara are due to transfer to 18 square miles of Forest from the former to the latter division. Change of figures in columns 5 and 8 is due to fresh measurement of the boundary line.
Do. Western ...	10·5	64	1,774	1,848	12	152	2,012	600 0 0	227 0 0	
Belgaum	5·5	24	1,882·5	1,912	90	137	2,139	2[illegible] 0 0	219 0 0	
Dhárwár—Bijápur .	.....	1,023	349	1,372	8	32	1,412	282 0 0	49 0 0	
Total, Southern Circle	52·0	1,404	14,172·5	15,628	110	574	16,312	1,230 0 0	1,968 0 0	
SIND CIRCLE.										
Sukkur	4	645	.....	649	.....	77	726	.....	.....	
Shikarpur	3	388	.....	391	.....	58	449	.....	.....	
Lárkána	13	389	.....	402	.....	78	480	.....	.....	
Hyderabad ...	3	352	.....	355	.....	196	551	.....	.....	
Karáchi	2	250	.....	252	.....	229	481	.....	.....	
Total, Sind Circle ...	25	2,024	.....	2,049	.....	638	2,687	.....	.....	
GRAND TOTAL PRESIDENCY ...	101	20,433	18,409	38,843	226	2,768	41,937	1,109 0 0	3,428 0 0	

FORM No. 10.—*Statement showing Forest Areas Surveyed and under Survey by the Survey of India Department during the year 1919-1920.*

Division.	Topographical Surveys. Special Surveys paid for by Forest Department. Previous. 4"=1 mile.	2"=1 mile.	Of the year. 4"=1 mile.	2"=1 mile.	Cost. Incurred during year.	Total to the end of year.	Ordinary Surveys not paid for by Forest Department. Previous. 2"=1 mile.	Smaller scales.	Of the year. 2"=1 mile.	Smaller scales.	Boundary Surveys. Previous.	Of the year.	Total area surveyed.	Area remaining to be surveyed.	Total area as per form 7.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NORTHERN CIRCLE.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs. a. p.	Rs. a. p.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	L. m.	L. m.	Sq. m.	Sq. m.	Sq. m.	
Reserved Forest.																
Panch Mahâls	...	...	...	...	.....	.....*	...	...	...	...	...	...	331	...	331	* Not available.
Surat	...	...	...	...	.....	2,509	...	...	...	...	...	...	412	...	412	
North Thána	...	...	...	...	.....	1,27,563	...	...	...	...	...	...	346	...	346	
West Thána	...	...	...	...	.....		...	...	...	...	...	...	289	...	289	
East Thána	...	...	...	...	.....		...	...	...	...	...	...	458	...	458	
West Násik	...	...	...	...	.....	1,11,290	...	...	...	...	...	...	351	...	351	
North Násik	...	...	...	...	.....		...	...	...	...	...	...	519	...	519	
East Nasik	...	...	...	...	.....		...	...	...	...	...	...	296	...	296	
Ahmedabad	...	...	...	...	.....	.....	...	...	...	...	...	...	19	...	19	
Total	...	...	...	...	.....	2,41,362	...	...	...	...	...	...	3,021	...	3,021	
Protected Forest.																
Surat	...	...	...	...	.....	.....	...	...	...	...	...	...	325	...	325	
North Thána	...	...	...	...	.....	.....	...	...	...	...	...	...	149	...	149	
West Thána	...	...	...	...	.....	.....	...	...	...	...	...	...	101	...	101	
East Thána	...	...	...	...	.....	.....	...	...	...	...	...	...	142	...	142	
West Násik	...	...	...	...	.....	.....	...	...	...	...	...	...	96	...	96	
Total	...	...	...	...	.....	.....†	...	...	...	...	...	...	813	...	813	† The Survey of India Forest map office is unable to give the cost as the surveys in question date from 1877.
Total, Northern Circle	...	...	...	...	.....	2,41,362	...	...	...	...	...	...	3,834	...	3,834	
CENTRAL CIRCLE.																
Reserved Forest.																
East Khándesh	...	...	...	...	Nothing done this year.	24,034	...	...	...	...	...	...	800	...	800	† Cost of the year has not been entered as the Survey and map offices do not supply any information.
West Khandesh	...	...	...	...		63,694	...	...	...	...	...	...	797	...	797	
North Khándesh	...	...	...	...		1,371	...	...	...	...	...	...	869	...	869	
Poona	...	...	...	...		1,11,290	...	...	...	...	...	...	981	...	981	
Sátára	...	...	...	...		62,569	...	...	...	...	...	...	711	...	711	
Kolába	...	...	...	...		Not known.	...	...	...	...	...	...	450	...	450	‡ The previous cost can not be checked as the Survey Department cannot give the figures.
Nagar & Sholápur	...	...	...	...		91,230	...	...	...	...	...	...	698	...	698	
Total	...	...	...	...	.....	3,54,238	...	...	...	...	...	...	5,306	...	5,306	
Protected Forest.																
Poona	...	...	...	...	.....	.....	...	...	...	...	...	...	11	...	11	† Represents cost of arrear mapping and cannot conveniently be distributed amongst the several Divisions including South and North Nasik.
Sátára	...	...	...	...	.....	7,085	...	...	...	...	...	...	1	...	1	
Kolába	...	...	...	...	.....	.....	...	...	...	...	...	...	74	...	74	
Total	...	...	...	...	.....	7,085	...	...	...	...	...	...	86	...	86	
Total, Central Circle	...	...	...	...	.....	3,61,323	...	...	...	...	...	...	5,392	...	5,392	
SOUTHERN CIRCLE.																
Reserved Forest.																
Kánara, Northern	...	...	...	...	.....		...	...	...	...	...	...	427	...	427	
Do. Eastern	...	...	...	...	.....		...	...	...	...	...	...	590	...	590	
Do. Central	...	...	...	...	.....	3,90,231	...	...	...	...	...	...	764	...	764	
Do. Southern	...	...	...	...	.....		...	...	...	...	...	...	656	...	656	
Do. Western	...	...	...	...	.....		...	...	...	...	...	...	814	...	814	
Belgaum	...	...	...	...	.....	57,104	...	...	...	...	...	...	663	...	663	
Dhárwár-Bijápur	...	...	...	...	.....	15,268	...	...	...	...	...	...	218	276	494	
Ratnágiri	...	...	...	...	.....	581	...	...	...	...	...	...	19	...	19	
Total	...	...	...	...	.....	4,63,184	...	...	...	...	...	...	4,171	276	4,447	
Protected Forest.																
Kánara Northern	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	...	
Do. Eastern	...	...	...	...	.....	.....	...	...	...	...	...	...	3	...	3	
Do. Central	...	...	...	...	.....	.....	...	...	...	...	...	...	51	...	51	
Do. Southern	...	...	...	...	.....	.....	...	...	...	...	...	...	70	...	70	
Do. Western	...	...	...	...	.....	.....	...	...	...	...	...	...	14	...	14	
Total	...	...	...	...	.....	.....	...	...	...	...	...	...	138	...	138	
Total, Southern Circle	...	...	...	...	.....	4,63,184	...	...	...	...	...	...	4,309	276	4,585	
SIND CIRCLE.																
Reserved Forest.																
Sukkur	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	337	
Shikarpur	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	166	
Larkána	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	172	
Hyderabad	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	241	
Karachi	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	219	
Total	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	1,135	
Protected Forest.																
Shikarpur	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	1	
Total, Sind Circle	...	...	...	...	.....	.....	...	...	...	...	...	...	.....	...	1,136	
GRAND TOTAL, PRESIDENCY	...	...	...	...	.....	10,65,869	...	...	...	...	...	...	13,535	276	14,947	

FORM No. 11.—*Progress made in Working Plans, during the year 1919-1920.*

Division.	Area under sanctioned Working Plans.					Area not under Working Plans.			Total forest area in Form No. 7-B, Total of columns 5, 7, 8 & 9.	Revision.			Expenditure on Working Plans during the year.	Remarks.
	At commencement of year.	Added during year.	Deducted during year.	At close of year.		Plans under preparation.	Plans not under preparation.			Due or required.	In progress at end of year.	Revised Plans sanctioned during year.		
				Actual area.	Percentage of total forest area (as shown in column 10).		Required at present.	Not required at present.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
NORTHERN CIRCLE.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Per ct.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
Reserved Forest.														
Panch Maháls ...	331	...	...	331	100	...	...	...	331	218	113	...	.....	
Surat ...	279	...	...	279	65·9	...	120	...	399	187	...	...	.....	
North Thána ...	346	...	...	346	100	...	...	...	346	...	346	...	.....	
West Thána ...	289	...	...	289	100	...	...	...	289	...	289	...	.....	
East Thána ...	458	...	...	458	100	...	...	...	458	84	374	...	.....	
West Násik ...	320	...	...	320	92·7	...	...	26	346	320	...	...	.....	
North Násik ...	400	...	...	400	80·9	...	...	94	494	400	...	...	.....	
East Násik ...	179	...	...	179	69·	...	...	79	258	179	...	...	.....	
Total ...	2,602	...	...	2,602	89·1	...	120	199	2,921	1,388	1,122	...	.....	
Protected Forest.														
North Thána ...	...	...	...	...	...	...	1	...	1	...	...	...	.....	
West Thána ...	...	...	...	...	...	...	12	...	12	...	...	...	.....	
Total ...	...	...	...	...	...	...	13	...	13	...	...	...	.....	
Leased Forests.														
Surat (Protected) ...	178	...	...	178	54·7	...	147	...	325	111	...	...	.....	
Total, Northern Circle ...	2,780	...	...	2,780	85·3	...	280	198	3,259	1,499	1,122	...	.....	

FORM No. 11—*Progress made in Working Plans, 1919-1920*—concluded.

Division.	Area under sanctioned Working Plans.					Area not under Working Plans.			Total forest area in Form No. 7B. Total of Columns 5, 7, 8 and 9.	Revision.			Expenditure on Working Plans during the year.	Remarks.
	At commencement of year.	Added during year.	Deducted during year.	At close of year.		Plans under preparation.	Plans not under preparation.			Due or required.	In progress at end of year.	Revised plans sanctioned during year.		
				Actual area.	Percentage of total forest area (as shown in column 10).		Required at present.	Not required at present.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CENTRAL CIRCLE.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	per ct.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
East Khándesh ...	749	...	...	749	98·	...	...	15	764	...	409*a*	...	.....	*a* Chopda, Raver and Yawal forests.
West Khándesh ...	180	...	...	180	29·	...	440*b*	...	620	...	...	...	.....	Sq. m. *b* Teak Forest of Navapur. 175 Scrub Forest of Sakri, Pimpalner and part of Dhulia ... 265 440
North Khándesh ...	564	...	...	564	64·9	305*c*	...	...	869	...	564	...	.....	Sq. m. *c* Akrani ... 304 Shirpur ... 1 305
Kolába ...	419	...	...	419	99·1	...	...	4	423	...	3·2*d*	...	.....	Sq. m. *d* Matheran ... 1·7 Kolaba working plan ... 1·3 Casuarina ... ·2 3·2
Poona ...	320	...	...	320	57·8	234	...	...	554	...	320	...	.....	*e* Blocks Nos. IV to IX of Mahabaleshwar.
Sátára ...	64	16*e*	...	80	15·5	97*f*	338*g*	...	515	64	...	...	.....	*f* Central Sátára Teak and Scrub Forests. *g* Evergreen forest of Mahabaleshwar part and part of Patan and Shirala, etc.
Total ...	2,296	16	...	2,312	61·7	636	778	19	3,745	64	1,296·2	...	.....	
Protected Forest.														
Poona ...	...	...	...	...	...	11	...	...	11	...	...	...	.....	
Sátára ...	...	...	...	...	...	...	1	...	1	...	...	...	.....	
Total ...	...	...	...	...	...	11	1	...	12	...	...	...	.....	
Leased Forest.														
Sátára ...	...	...	...	...	...	...	1	...	1	...	...	...	.....	
Total ...	...	...	...	...	...	...	1	...	1	...	...	...	.....	
Total, Central Circle...	2,296	16	...	2,312	61·5	647	780	19	3,758	64	1,296·2	...	.....	
SOUTHERN CIRCLE.														
Reserved Forest.														
Kánara, Northern ...	416	...	...	416	97·4	...	...	11	427	10.	107	...	.....	
Kánara, Eastern ...	332·5	...	...	332·5	56·7	22·5	...	231	586	157	157	...	.....	
Kánara, Central ...	278	...	18*	260	34·0	1	104	399	764	...	...	...	.....	*Transferred to Southern Division, Kánara.
Kánara, Southern ...	71	18*	...	89	13·5	97	...	470	656	...	...	...	.....	
Kánara, Western ...	258	...	...	258	31·6	...	...	556	814	...	...	...	.....	
Belgaum ...	331	...	...	331	48·6	348	...	2	681	168	168	...	.....	
Dhárwár-Bijápur ...	...	...	...	...	...	232	103	26	361	...	...	...	.....	
Total ...	1,686·5	18	18	1,686·5	39·3	700·5	207	1,695	4,289	432	432	...	.....	
Protected Forest.														
Kánara, Eastern ...	...	...	...	...	...	...	...	3	3	...	...	...	.....	
Kánara, Central ...	...	...	...	...	...	...	...	51	51	...	...	...	.....	
Kánara, Southern ...	...	...	...	...	...	...	...	70	70	...	...	...	.....	
Kánara, Western ...	...	...	...	...	...	...	...	14	14	...	...	...	.....	
Total ...	...	...	...	...	...	...	...	138	138	...	...	...	.....	
Total, Southern Circle .	1,686·5	18	18	1,686·5	35·8	700·5	207	1,833	4,427	432	432	...	.....	
SIND CIRCLE.														
Reserved Forests.														
Sukkur ...	300	...	...	300	89·02	13	...	24	337	...	...	...	.....	
Shikárpur ...	167	...	1	166	100·0	...	...	...	166	...	...	...	.....	
Lárkána ...	153	...	...	153	88·9	...	4	14	171	...	...	...	.....	
Hyderabad ...	236	...	10	226	93·7	...	9	6	241	...	...	...	.....	
Kárachi ...	223	...	5	217	98·6	...	...	2	219	...	...	...	.....	
Total ...	1,078	...	16	1,062	93·6	13	13	47	1,134	...	...	...	.....	
Protected Forests.														
Shikárpur ...	1	...	...	1	...	...	...	...	1	...	...	...	.....	
Total, Sind Circle ...	1,079	...	16	1,063	93·6	13	13	47	1,135	...	...	...	.....	
GRAND TOTAL, PRESIDENCY ...	7,841·5	34	34	7,841·5	62·3	1,360·5	1,280	2,098	12,579	1,995	2,850·2	...	.....	

FORM No. 11-A—*Abstract of Control Books for Working Plans for the year 1919-20.*

Division.	Name of Working Plan.	Year in which sanctioned.	Area up to date.		Brief statement of reasons for arrears.
			To be worked.	Actually worked.	
1	2	3	4	5	6
Northern Circle.				Acres.	
Panch Mahâls	Godhra	1896 and modified in 1905.	57,304	56,278	Certain coupes were inaccessible. Others too poor to attract bidders.
	Halol	1906	9,897	8,208	Do.
	Kalol	1905	8,780	4,772	Do.
	Dohad	1901, modified in 1910 and under revision from 1916.	3,926	3,503	Do.
	Jhalod		2,278	2,278	
Surat	Mandvi	1910	10,154	10,154	
	Bulsar	1900	1,664	1,654	Part of a coupe left uncut owing to boundary dispute.
	North Dangs	1914	15,066	10,950	Two felling areas are in arrears owing to influenza epidemic and scarcity of labour.
	South Dangs	1916	12,320	12,320	
North Thâna	Thâna clear cutting	Not yet sanctioned but introduced from 1917-1918.	3,140	2,497	Three coupes remained unsold (one coupe contained poor growth and two had no offers). A. g. Area of 3 coupes remaining unsold. 277 20 Area left unworked in 11 partially worked coupes by contractors ... 366 10 648 30
	Do.	Do.	6,795	6,353	Two coupes of the main series and seven of the Pole series were not sold owing to poor offers. 1 coupe of main series was inaccessible. 1 coupe withheld owing to extension given for working the last year's coupe during 1919-20.
West Thâna	Kandivli Fuel Plan	1899	32	32	
	Tulsi clear cutting	Not yet sanctioned but introduced from 1917-1918.	113	67	One coupe not sold owing to poor offer.
	Thâna clear cutting	Do.	7,726	6,692	Certain coupes were unsaleable.
	Igatpuri coppice with standards ...	1912	11,076	6,087	Do.
West Násik	Násik	1905	8,484	2,865	No demand for below-ghat coupes for want of communications. Above-ghat coupes being poorly stocked had no demand.
	Dindori	Do.	23,436	15,806	
	Peint	Do.	48,60	42,307	
	Ase (Mokhada Working Plan)	Do.	4,218	160	No demand for want of communications.
	Talasari do.	Do.	3,563	160	
North Násik	Malegaon (Anjan Working Plan) ...	Do.	3,427	842	No offers owing to poor stocking.
	Baglan (Teak do.) ...	Do.	897	89	Do. and they could not be worked departmentally at a profit.
	Do. (Scrub do.) ...	Do.	1,159	108	Had no offers owing to poor stocking.
	Kalwan (Teak do.) ...	Do.	1,066	657	
	Do. (Scrub do.) ...	Do.	390	220	
East Násik	Chandwad	1906	6,845	2,635	Poor stock and therefore no offers.
	Sinnar	1912	739	528	
	Kopargaon	1900	1,773	1,755	

FORM NO. 11-A—*Abstract of Control Books for Working Plans for the year 1919-20*—continued.

Division.	Name of Working Plan.	Year in which sanctioned.	Area up to date.		Brief statement of reasons for arrears.
			To be worked.	Actually worked.	
1	2	3	4	5	
CENTRAL CIRCLE.			A. g.	A. g.	
North Khándesh	Satpuda Working Plan	1918—19	.....	.....	
	Anjan series	.....	*823 24	714 24	
	Fuel series	.....	4,146 8	4,146 8	* Coupes being inaccessible not sold.
	Teak pole series	.....	*10,520 12	8,649 12	
	Old timber „	.....	10,849 24	10,849 24	
West Khándesh	Anjan Working Plan	1914—15	10,346 8	10,346 8	
	Deomogra Teak Working Plan	1904—05	10,707 0	10,707 0	
	Umarpata Teak Working Plan	1903—04	9,289 0	7,172 0	Want of labour and insufficiency of carts, etc.
East Khándesh	Chopda, Raver, Yawal (Satpura) ...	.....	14,856 0	6,614 0	Inaccessible coupes not sold.
	Jamner, Bhusaval and Edlabad	1905	676 3	580 30	
	Transpurna Babul of Edlabad	1915	437 20	352 27	
	Satmala and mixed forest of Chalisgaon ...	1914	2,738 9	1,901 14	
	Anjan and Scrub forest of Edlabad ...	1909	10,662 0	8,448 11	
	Khotali Babul Provisional Working Plan ...	.....	10 0	10 0	
Sátára	Mahabaleshwar Plateau Working Plan ...	1909—10	4,163 14	3,978 18	Some coupes were poor and inaccessible.
	Karad, Patan and Shirala teak forests ...	1907—08	9,682 20	8,125 10	Some coupes bear very little material for exploitation and some remained unsold on account of the low prices offered in the auction sales.
Kolába	Matheran Plateau	1908	667 33	593 12	Two coupes remained unexploited. No. 12 being in the midst of the bungalows and No. 18 remained to be worked in 1919-20.
	Casuarina Plantation	1915	14 1⅔	14 1⅔	
	Teak Working Plan	1907	53,633 6	46,863 0	Area (80·17) sold but not worked, area (5,303·37) not sold for want of purchasers and the area (1,385·32) not sold owing to immature growth.
Poona	Poona teak	1903	‡35,788 28	25,031 10	‡ Too sparsely wooded to permit working.
	Poona Babul	1902	‡7,026 29	6,043 29	
	Mulshi	1915	‡1,084 31	1,029 29	
	Sub-ghat mixed	1915	278 0	278 0	
	Lonavla and Khandala	1908	‡3,430 33	2,497 33	
	Ahmednagar teak	1905	25,316 15	6,752 10	The plan was suspended and not worked from 1910 to 1917.

* FORM NO. 11-A—*Abstract of Control Books for Working Plans for the year 1919-20.*

Division.	Name of Working Plan.	Year in which sanctioned.	Area up to date		Brief statement of reasons for arrears.
			To be worked.	Actually worked.	
1	2	3	4	5	6
SOUTHERN CIRCLE.			Acres.	Acres.	
Kánara, Northern	Supa High Forest Plan, Blocks I to VII ...	1895	129,589	128,726	Due to no contractor having been found for working of Block I compartment 10.
	Bhagwati Plan, Blocks VIII, IX and XX ...	1916	7,849	4,747	Due to compartments 1, 2 and 3 of Block IX not having been sold.
	Haliyál Teak Pole Plan	1904	22,335	22,335	
	Plan for Block VII-A	1915	254	254	
	Dhárwár Plan	1900	12 902	12,902	
	Kalghatgi Plan	1917	2,124	2,124	
Do. Eastern	Yellápur Slopes Plan	1905	2,744	2,340	
	Yellápur Aboveghat Plan	1905	81,004	63,949	
	Mundgod High Forest Plan	1908	28,404	18,165	
	Mundgod Teak Pole Area Plan	1909	9,239	9,239	
	Kirvatti Teak Pole Area Plan	1916	894 coupes 2,391 improvement fellings.	894 800	
	Bankapur Hangal Plan	1919	3,156	2,356	
	Kalghatgi Plan	1919	733	976	
Do. Central	Ankola High Forest Plan	1910	11,371	,418	Previous contract had to be extended; hence work which had to be done in next felling is behind hand.
	Ankola Kumta Coast Fuel Plan	1912	5,119	2,754	No demands were got. In some cases coupes were not sold on account of construction of road work.
	Sirsi Town Fuel Plan	1914	970	178	Coupes were sold to the public according to requirements for the supply of fuel.
	Yekambi-Sonda High Forest Plan ...	1915	10,118	8,299	The contractor was put on to special war work; hence this work fell in arrears.
	Arbail Slopes Plan	1918	1,277	.....	To be worked in 1918-19 and 1919-20. Prescription of plan not received in time to get compartments marked. 723 acres have been worked in compartment 11 which is excluded from the plans for certain reasons. Compartments 9 and 10 in Block XXVIII were not undertaken, but others more immediately suitable were taken in hand.
Do. Southern	Honáwar Tali Palm Plan	1919	9,875·8	10,303·8	Overworked owing to food famine and high prices for food-stuffs.
	Kasarkod Casuarina Plantation	1911	87	101	Over cut for supply to munitions.
	Soppin-hosalli High Forest Plan ...	1913	4,960	3,154	Shortage of labour.
	Chandawar Fuel Plan	1915	1,016	953	For supply of fuel to Kumta Town. Extension granted for cutting 63 acres.
Do. Western	Gund Plan	1896	29,695	8,830	Shortage of labour and want of communication.
	Kalinadi Slopes Plan	1911	7,075	6,281	
	Supa Fuel Plan	1906	Not prescribed in the Plan.	5,845	
	Kárwár Fuel Plan	1903	16,130	12,457	Blocks XII and XIV are not exploited as the forest has to be kept for privileges. Some coupes of other Blocks left uncut being unfit for exploitation. 638 acres out of the total in column 5 are irregular special fellings for war supply.
	Casuarina Plantations Plan	1911	80	134	Excess due to special war fellings in 1917 and 1918.
	Teak Plantations Plan	1910	713	713	
	Kadra, Mardi and Sulgeri Teak Plantations...				
Belgaum	Golihalli-Godoli Plan	1900	4,418	4,418	
	Khánápur Fuel Reserves	1903	40,008	35,901	Difficulty in procuring sufficient labour and transport.
	Varkhad Hemadge Plan	1906	1,720	1,606	
	Nagargali Plan	1915	1,900	1,544	
	Gokák Fuel Plan	1916	27,040	26,486	Due to coupes remaining unsold.
Dhárwár—Bijápur	Bankapur Hangal Plan	1919	1,230	1,224	
SIND CIRCLE.					
Sukkur	Sukkur Plan (under revision)	.....	9,753	9,712	
Shikárpur	Shikárpur do.	.....	5,937	5,921	
Lárkana	Lárkána do.	.....	6,779	6,452	
Hyderabad	Hyderabad Plan	1917	14,205	13,010	
Karáchi	Karáchi Plan	1916	19,795	19,024*	* An area of 262 acres of the blanks set apart for re-boisement of coupes which could not be exploited owing to shortage of labour is excluded.

FORM No. 12.—*Statement showing communications*

Division.	New works undertaken during the year.														
	Buildings.					Roads and paths.								Other works.	Total expenditure on new Works.
	Expenditure on				Total expenditure incurred.	Cart roads.		Bridle paths.		Others.		Total length of paths or roads.	Total expenditure incurred.	Expenditure incurred.	
	Head quarter houses.	Rest-houses.	Houses for subordinate establishment.	Others.		Length.	Cost.	Length.	Cost.	Length.	Cost.				
1	2(*a*)	2(*b*)	2(*c*)	2(*d*)	3	4(*a*)	4(*b*)	4(*c*)	4(*d*)	4(*e*)	4(*f*)	5	6	7	8
NORTHERN CIRCLE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...
Panch Mahâls ...	...	...	2,380 0 0	...	2,380 0 0	...	...	...	...	...	...	...	...	610 0 0	2,990 0 0
Surat ...	...	5,821 0 0	1,025 0 0	...	6,846 0 0	16	12,443 0 0	...	...	...	...	16	12,443 0 0	150 0 0	19,439 0 0
West Thâna ...	...	...	7,107 0 0	*650 0 0	7,757 0 0	3	3,172 0 0	...	...	...	...	3	3,172 0 0	...	10,929 0 0
East Thâna ...	16,781 0 0	...	3,789 0 0	...	20,570 0 0	½	360 0 0	...	...	...	...	½	360 0 0	996 0 0	21,926 0 0
North Thâna ...	2,363 0 0	...	25,232 0 0	...	27,595 0 0	16¾	7,189 0 0	...	...	...	...	16¾	7,189 0 0	698 0 0	35,482 0 0
West Násik	...	5,750 0 0	10,583 0 0	3,900 0 0	20,233 0 0	8	2,560 0 0	...	...	...	...	8	2,560 0 0	180 0 0	22,973 0 0
North Násik ...	...	...	...	...	.....	3	339 0 0	...	...	...	...	3	339 0 0	...	339 0 0
East Násik	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...
Total, Northern Circle ...	19,144 0 0	11,571 0 0	50,116 0 0	4,550 0 0	85,381 0 0	47¼	26,063 0 0	...	...	...	...	47¼	26,063 0 0	2,634 0 0	1,14,078 0 0
CENTRAL CIRCLE.															
East Khándesh ...	...	425 0 0	3,435 0 0	...	3,860 0 0	...	...	...	...	...	...	...	...	74 0 0	3,934 0 0
West Khándesh ...	...	...	291 0 0	...	291 0 0	...	...	...	...	...	...	...	...	448 0 0	739 0 0
North Khándesh ...	...	5,288 0 0	2,379 0 0	...	7,667 0 0	12	3,394 0 0	...	...	...	...	12	3,394 0 0	1,082 0 0	12,143 0 0
Poona ...	...	...	4,720 0 0	...	4,720 0 0	1¼	3,622 0 0	...	...	...	...	1¼	3,622 0 0	...	8,342 0 0
Sátára ...	...	...	2,792 0 0	...	2,792 0 0	9¼	2,644 0 0	...	...	...	...	9¼	2,644 0 0	...	5,436 0 0
Kolába ...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...
Total, Central Circle ...	...	5,713 0 0	13,617 0 0	...	19,330 0 0	23	9,660 0 0	...	...	...	...	23	9,660 0 0	1,604 0 0	30,594 0 0
SOUTHERN CIRCLE.						M. F.					Rs.	M. F.	Rs.		Rs.
Kánara, Northern ...	...	8,716 0 0	36,936 0 0	...	45,652 0 0	19 0	32,326 0 0	...	...	34 0	1,27,249	53 0	1,59,575	5,225 0 0	2,10,452
Kánara, Eastern ...	...	8,158 0 0	1,555 0 0	599 0 0	10,312 0 0	10 0	23,059 0 0	...	...	...	...	10 0	23,059	1,102 0 0	34,473
Kánara, Central ...	2,147 0 0	...	...	...	2,147 0 0	17 0	10,200 0 0	...	...	...	...	17 0	10,200	...	12,347
Kánara, Southern ...	...	2,508 0 0	841 0 0	...	3,349 0 0	8 5	10,954 0 0	...	...	...	..	8 5	10,954	...	14,303
Kánara, Western ...	...	1,810 0 0	...	...	1,810 0 0	5 0	9,407 0 0	...	...	...	...	5 0	9,407	215 0 0	11,432
Belgaum ...	1,722 0 0	...	190 0 0	...	1,912 0 0	17 3	15,395 0 0	...	...	...	...	17 3	15,395	1,332 0 0	18,639
Dhárwár-Bijápur ...	...	...	36 0 0	...	36 0 0	...	...	...	...	...	...	...	...	...	36 0 0
Total, Southern Circle ...	3,869 0 0	21,192 0 0	39,558 0 0	599 0 0	65,218 0 0	77 0	101,341 0 0	...	...	34 0	1,27,249	111 0	2,28,590	7,874 0 0	3,01,682
SIND CIRCLE.															
Sukkur ...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...
Shikárpur ...	...	...	...	...	.....	...	...	...	...	...	...	...	...	312 0 0	312 0 0
Lárkána ...	...	...	...	...	.....	...	...	...	...	...	...	...	...	223 0 0	223 0 0
Hyderabad ...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...
Karáchi ...	...	...	30 0 0	...	30 0 0	...	...	...	...	...	...	...	..	...	30 0 0
Total, Sind Circle ...	...	...	30 0 0	...	30 0 0	...	...	...	...	...	...	...	...	540 0 0	670 0 0
Grand Total Presidency...	23,013	38,476 0 0	1,03,321	5,149 0 0	1,69,959 0 0	147¼	1,37,064	...	...	34	1,27,249	181¼	2,64,313	12,652 0 0	4,46,924 0 0

and buildings during the year 1919-20.

Repairs executed during the year.															
Buildings.					Roads and paths.								Other works.		
Expenditure on					Cart roads		Bridle paths.		Others.						Remarks.
Head quarter houses.	Rest-houses.	Houses for subordinate establishment.	Others.	Total expenditure incurred.	Length.	Cost.	Length.	Cost	Length.	Cost.	Total length of paths or roads.	Total expenditure incurred.	Expenditure incurred.	Total expenditure incurred.	
9(*a*)	9(*b*)	9(*c*)	9(*d*)	10	11(*a*)	11(*b*)	11(*c*)	11(*d*)	11(*e*)	11(*f*)	12	13	14	15	16
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Miles.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
352 0 0	...	...	...	352 0 0	...	...	...	...	...	...	.....	.....	.....	352 0 0	
412 0 0	...	52 0 0	...	464 0 0	...	...	...	...	...	...	.....	.....	47 0 0	511 0 0	
...	...	4,717 0 0	...	4,717 0 0	286½	5,351 0 0	...	...	...	...	286½	5,351 0 0	569 0 0	10,637 0 0	
...	...	696 0 0	...	696 0 0	14	639 0 0	...	...	...	...	14	639 0 0	185 0 0	1,520 0 0	*Cash Contribution for Chawadi.
493 0 0	...	273 0 0	...	766 0 0	34¾	1,807 0 0	...	...	...	...	34¾	1,807 0 0	214 0 0	2,787 0 0	
1,399 0 0	...	933 0 0	...	2,332 0 0	...	...	...	...	...	...	.....	.....	89 0 0	2,421 0 0	†Rs. 1,100 contribution for the maintenance of a road by Local Board.
2,050 0 0	...	1,750 0 0	...	3,800 0 0	29	‡3,091 0 0	...	...	...	...	29	‡3,091 0 0	9 0 0	6,900 0 0	
...	...	30 0 0	...	30 0 0	...	...	...	...	...	...	.....	.....	.....	30 0 0	
...	...	57 0 0	...	57 0 0	...	...	...	...	...	...	.....	.....	.....	57 0 0	
4,706 0 0	...	8,508 0 0	...	13,214 0 0	364¼	10,888 0 0	...	...	...	...	364¼	10,888 0 0	1,113 0 0	25,215 0 0	
...	563 0 0	706 0 0	...	1,269 0 0	59	1,766 0 0	...	...	...	...	59	1,766 0 0	147 0 0	3,182 0 0	
...	...	150 0 0	339 0 0	489 0 0	20	2,596 0 0	...	...	...	198 0 0	20	2,794 0 0	35 0 0	3,318 0 0	
550 0 0	2 0 0	369 0 0	123 0 0	1,044 0 0	19	1,068 0 0	150	1,544 0 0	...	...	169	2,612 0 0	76 0 0	3,732 0 0	
...	109 0 0	176 0 0	...	285 0 0	3	263 0 0	...	...	...	...	3	263 0 0	.....	548 0 0	
...	...	222 0 0	86 0 0	308 0 0	11	919 0 0	31½	92 0 0	...	...	42½	1,011 0 0	.....	1,319 0 0	
...	...	561 0 0	...	561 0 0	7	175 0 0	...	...	...	...	7	175 0 0	.....	736 0 0	
550 0 0	674 0 0	2,184 0 0	548 0 0	3,956 0 0	119	6,787 0 0	181½	1,636 0 0	...	198 0 0	300½	8,621 0 0	258 0 0	12,835 0 0	
					M. F.		M. F.				M. F.				
399 0 0	12 0 0	21,984 0 0	...	22,395 0 0	...	26,309 0 0 10,000 0 0	...	...	...	...	.....	30,309 0 0	634 0 0	53,338 0 0	*Contribution to the Local Boards.
...	476 0 0	1,442 0 0	123 0 0	2,041 0 0	84 0	19,618 0 0 *5,000 0 0	...	...	...	...	84 0	54,618 0 0	1,964 0 0	58,623 0 0	
110 0 0	104 0 0	527 0 0	...	741 0 0	5 5	4,311 0 0	...	...	...	...	5 5	4,311 0 0	2 0 0	5,054 0 0	
...	6 0 0	722 0 0	...	728 0 0	13 0	510 0 0	2 0	5 0 0	...	...	15 0	515 0 0	62 0 0	1,305 0 0	
52 0 0	1,030 0 0	1,040 0 0	...	2,122 0 0	117 0	39,923 0 0 *10,000 0 0	17 0	112 0 0	...	...	134 0	50,035 0 0	63 0 0	52,220* 0 0	
461 0 0	1,270 0 0	607 0 0	...	2,338 0 0	86 3	10,239 0 0	...	...	...	...	86 3	10,239 0 0	182 0 0	12,759 0 0	
...	...	176 0 0	9 0 0	185 0 0	...	...	...	...	...	...	.....	.....	81 0 0	266 0 0	
1,022 0 0	2,898 0 0	26,498 0 0	132 0 0	30,550 0 0	306	1,49,910 0 0	19 0	117 0 0	...	...	32 5	1,50,027 0 0	2,988 0 0	1,83,565 0 0	
...	39 0 0	893 0 0	...	932 0 0	...	...	...	...	...	...	.....	.....	213 0 0	1,145 0 0	
...	5 0 0	602 0 0	...	607 0 0	...	...	...	...	...	...	.....	.....	625 0 0	1,232 0 0	
156 0 0	...	386 0 0	...	542 0 0	...	...	...	...	...	...	.....	.....	654 0 0	1,196 0 0	
1,034 0 0	87 0 0	202 0 0	...	1,323 0 0	...	...	...	...	...	...	.....	.....	814 0 0	2,137 0 0	
1,274 0 0	...	95 0 0	...	1,369 0 0	...	...	...	...	...	...	.....	.....	3,227 0 0	4,596 0 0	
2,464 0 0	131 0 0	2,178 0 0	...	4,773 0 0	...	...	...	...	...	...	.....	.....	5,533 0 0	10,306 0 0	
8,742 0 0	3,703 0 0	39,368 0 0	680 0 0	52,493 0 0	789¼	1,67,585 0 0	209½	1,753 0 0	...	198 0 0	998½	1,69,536 0 0	9,892 0 0	2,31,921 0 0	

FORM No. 13.—*Statement showing register of*

Forest Division.	Cases pending from previous year.			New cases of the year.														
				Injury to forest by fire.			Unauthorized felling.			Unauthorized grazing.			Other offences.			Total.		
	A.	B.	All.	A.	B.	C.	A.	B.	C.	A.	B.	C.	A.	B.	C.	A.	B.	C.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
NORTHERN CIRCLE.																		
Panch Mahâls ...	4	55	59	3	9	106	4	350	154	6	809	2	1	29	...	14	1,197	262
Surat ...	...	(a) 9	9	3	2	2	...	10	5	1	22	...	...	2	...	4	36	7
North Thâna ...	5†	134	139	3	5	29	...	61	20	1	125	...	...	6	2	4	197	51
West Thâna ...	24	...	24	13	4	44	31	169	29	21	289	3	7	31	...	72	493	76
East Thâna ...	28	223	251	16	21	128	23	202	84	17	343	2	5	129	1	61	695	215
West Násik ...	...	(b) 33	33	3	16	57	5	131	21	6	157	...	...	63	7	13	367	85
North Násik ...	7	...	7	1	8	16	3	144	24	1	164	...	...	15	...	5	331	40
East Násik ...	15†	21	36	...	5	33	10	490	25	9	288	...	...	34	...	19	817	58
Total, Northern Circle ...	83	475	558	42	70	415	76	1,557	362	61	2,197	7	13	309	10	192	4,133	794
CENTRAL CIRCLE.																		
East Khándesh ...	16	(b)* 263	279	4	28	27	12	244	81	7	420	4	3	216	2	26	908	114
West Khándesh ...	6	440	446	3	1	87	4	366	71	1	216	1	2	55	2	10	638	161
North Khándesh ...	24	(a) 365	389	3	23	35	13	164	45	3	108	...	1	65	1	20	360	81
Poona ...	14	388	402	2	54	154	31	640	51	22	626	1	6	162	...	61	1,482	206
Sátára ...	34	(a) (b) 189	223	4	17	86	23	576	38	21	545	...	11	134	2	59	1,272	126
Kolába ...	99	180	279	36	4	61	65	198	159	144	266	9	12	46	...	257	514	229
Total, Central Circle ...	193	1,825	2,018	52	127	450	148	2,188	445	198	2,181	15	35	678	7	433	5,174	917
SOUTHERN CIRCLE.																		
Kánara, Northern ...	12	(a)1 106	118	1	9	84	7	50	6	11	200	1	1	1	...	20	260	91
Kánara, Eastern ...	3	12	15	...	5	122	...	40	5	...	75	...	...	1	...	...	121	127
Kánara, Central ...	14	(a)1 79	93	...	4	273	5	210	35	...	19	...	...	16	...	5	249	308
Kánara, Southern ...	13	(a) 181	194	1	12	148	1	77	71	...	26	...	...	58	2	2	573	221
Kánara, Western ...	5	17	22	2	...	77	7	207	51	2	50	6	...	8	10	11	265	143
Belgaum ...	22	242	264	2	17	204	12	369	75	15	619	22	1	33	...	30	1,038	301
Dhárwár-Bijápur ...	9	(a)1 99	108	...	1	52	8	289	36	6	386	...	2	28	...	16	704	88
Total, Southern Circle.	78	736	814	6	48	960	40	1,642	279	34	1,375	28	4	145	12	84	3,210	1,279
SIND CIRCLE.																		
Sukkur ...	5	...	5	...	4	37	24	262	73	4	501	...	3	...	...	31	767	110
Shikárpur ...	8	...	8	1	...	19	2	323	59	3	348	...	1	5	...	7	676	78
Lárkána ...	3	112	115	...	...	21	2	384	1	11	263	...	6	9	...	19	656	22
Hyderabad ...	27	...	27	...	...	4	26	234	34	4	146	...	...	...	...	30	380	38
Karáchi ...	7	10	17	...	...	15	2	96	18	1	134	1	...	6	...	3	236	34
Total, Sind Circle ...	50	122	172	1	4	96	56	1,299	185	23	1,392	1	10	20	...	90	2,715	282
Grand Total Presidency ...	404	3,158	3,562	101	249	1,921	320	6,686	1,271	316	7,145	51	62	1,152	29	799	15,232	3,272

(a) Seven cases were transferred to C.

(b) One case was transferred to A.

* Two transferred from B.

breaches of Forest Rules during the year 1919-20.

Total cases.				Disposed of during the year.														Cases pending at the close of the year.			Remarks.
				Convictions.				Acquittals.				Total.									
				Cases.		Persons.		Cases.		Persons.		Cases.			Persons.						
A.	B.	C.	All.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	All.	A.	B.	All.	A.	B.	All.	
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
18	1,252	262	1,532	17	1,142	50	3,055	1	...	1	...	18	1,142	1,160	51	3,055	3,106	...	110	110	
4	45	7	56	4	40	4	96	...	...	...	...	4	40	44	4	96	100	...	5	5	
9	331	51	391	7	320	18	609	1	...	2	...	8	320	328	20	609	629	...	11	11	
96	493	76	665	71	493	153	1,325	6	...	6	...	77	493	570	159	1,325	1,484	19	...	19	
89	918	215	1,222	57	918	81	2,168	...	...	...	...	57	918	975	81	2,168	2,249	32	...	32	
13	395	90	498	6	393	21	1,164	...	...	...	...	6	393	399	21	1,164	1,185	7	2	9	
12	331	40	383	10	300	24	672	...	...	...	...	10	300	310	24	672	696	2	31	33	
34	838	58	930	24	832	88	2,185	...	..	...	...	24	832	856	88	2,185	2,273	7	6	13	
275	4,603	799	5,677	196	4,438	439	11,274	8	...	9	...	204	4,438	4,642	448	11,274	11,722	67	165	232	
42	1,148	137	1,327	30	881	73	2,889	3	...	4	...	33	881	914	77	2,889	2,966	9	(b) 259	268	
16	1,078	161	1,255	11	844	39	1,947	2	...	14	...	13	844	857	53	1,947	2,000	3	234	237	
44	725	81	850	31	588	91	1,184	3	...	5	...	34	588	622	96	1,184	1,280	10	137	147	
75	1,870	206	2,151	63	1,581	167	3,442	5	...	16	...	68	1,581	1,649	183	3,442	3,625	7	289	296	
93	1,459	128	1,680	65	1,267	177	2,929	7	...	24	...	72	1,267	1,339	201	2,929	3,130	20	192	212	
356	694	229	1,279	269	595	588	1,465	21	...	59	...	290	595	885	647	1,465	2,112	65	99	164	
626	6,974	942	8,542	469	5,756	1,135	13,856	41	...	122	...	510	5,756	6,266	1,257	13,856	15,113	114	1,210	1,324	
32	366	91	489	27	328	43	877	4	...	7	...	31	328	359	50	877	927	1	37	38	
3	133	127	263	2	110	5	278	1	...	2	...	3	110	113	7	278	285	...	23	23	
19	328	308	655	12	232	14	501	2	...	19	...	14	232	246	33	501	534	4	72	76	
15	754	221	990	11	525	29	1,488	2	...	5	...	13	525	538	34	1,488	1,522	2	229	231	
16	282	143	441	13	281	16	606	2	...	4	...	15	281	296	20	606	626	1	1	2	
52	1,280	301	1,633	31	1,097	60	2,632	4	...	44	...	35	1,097	1,132	104	2,632	2,736	17	183	200	
25	803	88	916	8	701	20	2,047	2	...	6	...	10	701	711	26	2,047	2,073	15	99	114	
162	3,946	1,279	5,387	104	3,274	187	8,429	17	...	87	...	121	3,274	3,395	274	8,429	8,703	40	644	684	
36	767	110	913	23	708	35	828	3	...	5	...	26	703	734	40	828	868	10	59	69	
15	676	78	769	7	676	19	805	..	...	...	...	7	676	683	19	805	824	8	...	8	
22	768	22	812	8	586	20	612	...	...	...	...	8	586	594	20	612	632	14	182	196	
57	380	38	475	5	320	7	738	2	1	9	1	7	321	328	16	739	755	50	59	109	
10	246	34	290	1	241	1	308	3	...	14	...	4	241	245	15	308	323	4	5	9	
140	2,837	282	3,259	44	2,531	82	3,291	8	1	28	1	52	2,532	2,584	110	3,292	3,402	86	305	391	
1,203	18,360	3,302	22,865	813	15,999	1,843	36,850	74	1	246	1	887	16,000	16,887	2,089	36,851	38,940	307	2,324	2,631	

FORM No. 14.—*Area of Forest Tracts protected from fire during 1919-1920.*

Division.	Forest Ranges.	Year in which protection commenced.	Area attempted to be protected in 1918-19.	Area actually protected in 1918-1919.	Area attempted to be protected in 1919-1920.	Failures.	Area actually protected in 1919-1920.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.			Acres.	Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
Panch Mahals	South Godhra Range.	1878-79 ...	51,828	51,828	51,828	834	50,994	3,211 0 0	
	North do. ...	,, ...	37,428	37,425	37,428	229	37,199		
	Kalol	,, ...	21,527	21,523	21,527	1,184	20,343		
	Hálol	,, ...	28,264	27,787	28,264	1,093	27,171		
	Dohad	,, ...	46,242	46,161	46,242	6,488	39,754		
	Jhalod	,, ...	26,863	26,783	26,862	2,698	24,164		
	Total ...	...	212,152	211,507	212,151	12,526	199,625	3,211 0 0	
Surat	Dángs Range ...	1878-79 ...	419,810	417,709	419,808	478	419,330	6,976 0 0	
	Mándvi	,, ...	40,887	40,686	40,887	...	40,887		
	Bulsár-Chikhli ...	,, ...	2,810	2,799	2,807	...	2,807		
	Total ...	...	463,507	461,194	463,502	478	463,024	6,976 0 0	
North Thána ...	Sanjan Range ...	1878-79 ...	31,247	30,729	31,245	501	30,744	3,366 0 0	
	Udhwa	,, ...	35,712	35,169	35,712	265	35,447		
	Kasa	,, ...	62,478	62,008	62,479	1,713	60,766		
	Palghar	,, ...	28,889	28,262	28,958	161	28,797		
	Manor	,, ...	29,119	28,448	29,120	79	29,041		
	Dahisar	,, ...	33,851	33,168	33,836	997	32,839		
	Total ...	...	221,296	217,784	221,350	3,716	217,634	3,366 0 0	
West Thána ...	Bassein	1878-79 ...	41,037	40,977	41,037	15	41,022	3,691 0 0	
	West Váda	,, ...	32,919	32,417	32,919	1,824	31,095		
	Bhiwandi	,, ...	43,970	41,909	43,970	1,682	42,288		
	Sálsette	,, ...	14,808	13,988	14,808	355	14,453		
	Kalyán	,, ...	33,438	31,433	33,438	679	32,759		
	West Murbád ...	,, ...	26,480	26,356	26,480	2,072	24,408		
	Total ...	...	192,652	187,080	192,652	6,627	186,025	3,691 0 0	
East Thána ...	Khardi	1878-79 ...	52,354	45,418	45,600	8,516	37,084	4,529 0 0	
	Mokháda	,, ...	41,838	40,545	24,645	2,151	22,494		
	North Sháhápur ...	,, ...	45,604	37,013	29,370	596	28,774		
	South do. ...	,, ...	24,645	21,862	52,354	5,980	46,374		
	East Murbad ...	,, ...	29,370	27,799	41,838	508	41,330		
	East Wada ...	,, ...	45,809	44,422	45,809	1,500	44,309		
	Igatpuri ...	,, ...	53,875	53,539	53,602	1,701	51,901		
	Total ...	...	293,495	270,598	293,218	20,952	272,266	4,529 0 0	
West Násik ...	Násik	1878-79 ...	40,928	40,797	51,795	1,822	49,973	206 0 0	
	Dindori	,, ...	53,736	53,672	53,736	4,558	49,178		
	Peint	,, ...	126,234	125,688	115,649	145	115,504		
	Total ...	...	220,898	220,157	221,180	6,525	214,655	206 0 0	
North Násik ...	Málegaon	1878-79 ...	89,139	89,139	89,139	876	88,263	249 0 0	
	Baglan	,, ...	119,995	119,995	119,995	1,127	118,868		
	Kalwan	,, ...	107,032	107,032	107,032	499	106,533		
	Total ...	...	316,166	316,166	316,166	2,502	313,664	249 0 0	
East Násik ...	Chandor	1878-79 ...	30,112	30,112	30,112	223	29,889	114 0 0	
	Nandgaon	,, ...	77,586	77,586	77,586	3,729	73,857		
	Sinnar	,, ...	31,601	31,601	31,601	208	31,393		
	Yeola	,, ...	25,831	25,831	25,831	140	25,691		
	Total ...	...	165,130	165,130	165,130	4,300	160,830	114 0 0	
	Total, Northern Circle.	...	20,85,296	2,049,616	2,085,349	57,626	20,27,723	22,342 0 0	

FORM No. 14.—*Area of Forest Tracts protected from fire during 1919-1920*—continued.

Division.	Forest Ranges.	Year in which protection commenced.	Area attempted to be protected in 1918-1919.	Area actually protected in 1918-1919.	Area attempted to be protected in 1919-1920.	Failures.	Area actually protected in 1919-1920.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9	10
			Acres.	Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
CENTRAL CIRCLE.									
East Khándesh ...	Chálisgaon	1878-79 ...	38,250	38,250	38,250	1,320	36,930	163 0 0	
	Chopda	,, ...	107,700	102,423	107,700	2,303	105,397	931 0 0	
	Edlabad	,, ...	41,346	40,807	41,346	2,665	38,681	92 0 0	
	Jalgaon	,, ...	38,812	38,226	38,799	422	38,377	.....	
	Jámner	,, ...	64,390	64,059	64,390	4,092	60,298	12 0 0	
	Parola	,, ...	43,921	43,918	43,897	276	43,621	.....	
	Ráver	,, ...	76,210	74,522	76,210	1,825	74,385	234 0 0	
	Yáwal	,, ...	78,000	66,950	78,000	47	77,953	581 0 0	
	Huzur	,, ...	...	...	...	...	...	29 0 0	
	Total ...	...	488,629	469,155	488,592	12,950	475,642	2,042 0 0	
West Khándesh ...	Dhulia	1878-79 ...	75,796	75,796	75,696	70	75,626	51 0 0	
	Sákri and Pimpalner.	,, ...	180,847	180,104	146,172	24,056	122,116	1,516 0 0	
	Nandurbár	,, ...	70,155	70,149	70,167	1,805	68,362	1,344 0 0	
	Navápur	,, ...	70,129	65,048	70,103	16,773	53,330	2,128 0 0	
	Total ...	...	396,927	391,097	362,128	42,704	319,424	5,039 0 0	
North Khándesh ...	Akráni	1878-79 ...	194,683	174,683	194,683	10,800	183,883	2,045 0 0	
	Taloda	,, ...	71,161	71,069	71,161	11,557	59,604	1,915 0 0	
	Sháhada	,, ...	83,663	72,653	83,663	9,635	74,028	1,107 0 0	
	Shirpur, East ...	,, ...	206,772	205,610	206,772	32,672	174,100	2,420 0 0	
	Do. West ...								
	Total ...	...	556,279	531,015	556,279	64,664	491,615	7,487 0 0	
Kolába ...	Alibág	1889-90 ...	27,489	27,109	27,489	19	27,470	.....	
	Pen	,, ...	29,964	29,427	29,964	373	29,591	.....	
	Panvel	,, ...	27,572	27,272	27,572	231	27,341	.....	
	Karjat	,, ...	32,520	30,065	32,520	621	31,899	42 0 0	
	Khálápur	,, ...	21,879	21,274	21,879	445	21,434	14 0 0	
	Nágothna	,, ...	35,219	35,007	35,219	298	34,921	.....	
	Roha	,, ...	39,278	38,263	39,278	210	39,068	.....	
	Mángaon	,, ...	26,290	26,208	26,290	180	26,110	.....	
	Mahád	,, ...	25,877	25,666	26,133	85	26,048	.....	
	Dápoli	,, ...	2,119	2,111	2,261	0	2,261	.....	
	Mátherán	,, ...	1,061	1,051	1,061	0	1,061	94 0 0	
	Total ...	...	269,268	263,452	269,666	2,462	267,204	150 0 0	
Poona	Haveli	1879-80 ...	26,523	25,423	26,523	4,321	22,202	90 0 0	
Sátára	Mahábleshwar ...	1909-10 ...	11,983	11,244	11,983	891	11,092	168 0 0	
	Total, Central Circle.	...	1,749,609	1,691,386	1,715,171	127,992	1,587,179	14,976 0 0	

FORM No. 14.—*Area of Forest Tracts protected from fire during 1919-1920*—continued.

Division.	Forest Ranges.	Year in which protection commenced.	Area attempted to be protected in 1918-19.	Area actually protected in 1918-19.	Area attempted to be protected in 1919-20.	Failures.	Area actually protected in 1919-1920.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9	10
SOUTHERN CIRCLE.			Acres.	Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
Kánara, Northern ...	Haliyál	1887-88 ...	51,225	49,128	51,225	3,950	47,275	1,668 0 0	
	Sambrani	,, ...	47,113	36,223	47,113	17,939	29,174	446 0 0	
	Dandeli	,, ...	53,695	26,246	53,695	495	53,200	1,548 0 0	
	Virnoli	,, ...	46,825	10,873	46,825	615	46,210	460 0 0	
	Kulgi	,, ...	29,261	17,989	29,261	50	29,211	198 0 0	
	Kalghatgi	1888-89 ...	44,884	44,381	44,884	19,476	25,408	814 0 0	
	Total ...	...	273,003	184,850	273,003	42,525	230,478	5,134 0 0	
Kánara, Eastern ...	Yellápur	1888-89 ...	114,763	74,763	114,763	5,296	109,467	964 0 0	
	Kirwatti	,, ...	66,126	6,126	66,126	21,072	45,054	2,410 0 0	
	Bhartanhalli	,, ...	64,085	24,085	64,085	506	63,579	657 0 0	
	Mundgod	,, ...	64,303	24,303	64,303	17,020	47,283	1,611 0 0	
	Katur	,, ...	42,343	22,343	42 343	27,390	14,953	753 0 0	
	Dhundshi	,, ...	24,141	23,771	24,141	4,673	19,468	99 0 0	
	Total ...	...	375,761	175,391	375,761	75,957	299,804	6,494 0 0	
Kánara, Central ...	Sirsi East	1906-07 .	215,273	189,685	215,273	8,177	201,658	450 0 0	
	Do. West					5,438			
	Ankola	1888-89 .	221,806	216,164	221,806	813	220,229	496 0 0	
	Ramanguli					764			
	Madangiri	1899-00 ...	61,751	60,506	55,898	313	55,585	124 0 0	
	Total ...	..	498,830	466,355	492,977	15,505	477,472	1,070 0 0	
Kánara, Southern ...	Siddápur	1910-11 ...	141,193	132,151	141,280	6,879	134,401	160 0 0	
	Honávar	1900-01 ...	122,546	121,630	94,025	311	93,714	108 0 0	
	Bhatkal	1899-00 ..	124,002	121,302	64,089	796	63,293	75 0 0	
	Kumta	1900-01 ...	...	...	101,088	1,238	99,850	129 0 0	
	Total ...	...	387,741	375,083	400,482	9,224	391,258	472 0 0	
Kánara, Western ...	Kárwár	1887-88 ...	81,656	79,747	81,656	724	80,932	833 0 0	
	Kadra	,, ...	205,638	204,362	205,639	666	204,973	1,220 0 0	
	Supa	1888-89 ...	219,377	178,262	219,378	2,107	217,271	957 0 0	
	Gund	,, ...	23,484	21,268	23,484	53	23,431	369 0 0	
	Total ...	...	530,155	483,639	530,157	3,550	526,607	3,379 0 0	
Belgaum	Patne	1888-89 ...	84,448	79,610	71,873	3,839	68,034	828 0 0	
	Merde	1886-87 ...	48,492	39,080	48,552	4,525	44,027	1,085 0 0	
	Khánápur	1910-11 ...	77,784	64,964	77,854	6,811	71,043	1,292 0 0	
	Jamboti	1889-90 ...	97,717	96,313	97,717	611	97,106	609 0 0	
	Gujanal	1894-95 ...	126,995	126,690	70,442	4,838	65,604	1,012 0 0	
	Gokak	,, ...	...	...	69,174	178	68,996	285 0 0	
	Total ...	...	435,436	406,657	435,612	20,802	414,810	5,111 0 0	
Dhárwár-Bijápur ...	Dhárwár	1889-90 ...	21,131	21,131	21,147	429	20,718	18 0 0	
	Hangal	,, ...	12,799	12,522	12,849	2,155	10,694	316 0 0	
	Kod	1907-08 ...	41,195	40,991	41,358	4,110	37,248	237 0 0	
	Bádámi	1889-90 ...	3,703	3,668	3,703	26	3,677	270 0 0	
	Bágalkot	,, ...	48,984	48,914	48,904	38	48,866	157 0 0	
	Total ...	...	127,812	127,226	127,961	6,758	121,203	998 0 0	
	Total, Southern Circle.	...	2,628,738	2,219,201	2,635,953	174,321	2,461,632	22,658 0 0	

FORM No. 14.—*Area of Forest Tracts protected from fire during 1919-1920*—concluded.

Division.	Forest Ranges.	Year in which protection commenced.	Area attempted to be protected in 1918-19.	Area actually protected in 1918-19.	Area attempted to be protected in 1919-1920.	Failures.	Area actually protected in 1919-20.	Cost.	Remarks
1	2	3	4	5	6	7	8	9	10
SIND CIRCLE.			Acres.	Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
Sukkur	Mirpur	1903	44,877	44,396	44,227	448	43,779	.....	
	Ghotki	„	30,569	30,155	30,556	293	30,263	.....	
	Pano Akil	1902	52,418	51,697	54,576	161	54,415	.....	
	Sukkur	1903	39,532	39,259	39,762	39	39,723	.....	
	Rohri	„	45,993	45,814	46,443	384	46,059	641 0 0	
	Total	...	213,389	211,321	215,564	1,325	214,239	641 0 0	
Shikarpur	Ruk	1878-79	34,426	34,115	33,556	270	33,286	275 0 0	
	Shikarpur	1885-86	46,701	46,695	46,701	1	46,700	.....	
	Kashmore	1895-96	34,750	34,729	26,301	179	26,122	.....	
	Total	...	115,877	115,539	106,558	450	106,108	275 0 0	
Lárkána	Lárkána	1918	26,174	24,608	26,166	18	26,148	.....	
	Radhan		22,378	22,358	22,386	15	22,321	.....	
	Sehwán	1918	22,202	21,212	21,245	155	21,090	70 0 0	
	Kandiáro	1915	39,014	38,827	40,037	30	40,007	32 0 0	
	Total	...	109,768	107,005	109,784	218	109,566	102 0 0	
Hyderabad	Hyderabad	1915-16	2,223	2,223	2,223	...	2,223	100 0 0	
	Miáni	„	25,811	25,699	22,755	...	22,755		
	Hála	„	55,944	55,290	54,062	...	54,062		
	Sakrand	„	50,167	47,487	50,948	73	50,875		
	Manjhand	„	24,656	24,650	24,250	...	24,250		
	Total	...	155,801	155,355	154,238	73	154,165	100 0 0	
Karachi	Katiar	1912-13	19,362	19,354	18,266	...	18,266	49 0 0	
	Mulchand	„	47,814	46,959	47,422	208	47,214	856 0 0	
	Sujawal	„	22,245	21,311	21,695	6	21,689	76 0 0	
	Tatta	„	52,587	52,314	53,055	116	52,939	269 0 0	
	Total	...	142,008	139,938	140,438	330	140,108	1,250 0 0	
	Total, Sind Circle	...	739,843	729,158	726,582	2,396	724,186	2,368 0 0	
	GRAND TOTAL, PRESIDENCY	...	7,203,486	6,689,361	7,163,055	362,335	6,800,720	62,343 0 0	

* In Printed report for the last year in Col. 7 figures 43,396 were written instead of 44396.

FORM No. 15.—*Causes of*

Division or Circle.	(A) Fires caused by accident or through carelessness in burning fire lines.		(B) Fires entering the forests by crossing exterior fire-traces.		(C) FIRES BEGINNING INSIDE THE							
					Owing to carelessness or accident.							
					By workmen employed in the forests, by purchasers, cutters, etc.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire-balloons.	
	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
NORTHERN CIRCLE.												
Panch Mahâls	9	87	1	3	3	460	14	62	5	124	...	...
Surat	...	...	1	150	...	...	6	328	...	...	...	...
North Thâna	1	30	3	310	3	42	4	509	...	...	...	...
West do.	2	715	17	1,777	1	300	...		2	72	...	...
East do.	12	1,785	5	900	9	2,312	16	1,758	5	775	...	...
West Násik	16	732	...	...	...	...	38	3,266	...	...	...	...
North do.	1	5	1	600	...	...	7	125	...	...	...	...
East do.	1	2,300	4	356	...	...	1	1	6	238	...	...
Total, Northern Circle ...	42	5,654	32	4,096	16	3,114	86	6,049	18	1,209	...	...
CENTRAL CIRCLE.												
East Khándesh	4	1,338	9	1,483	8	3,078	13	1,484	2	306	...	...
West do.	...	...	2	12	...	...	7	1,805	...	...	...	...
North do.	...	...	6	5,125	10	13,168	4	4,502	...	...	...	...
Poona	...	...	27	707	...	...	27	1,185	2	67	...	...
Sátára	...	...	33	497	...	...	13	437	...		...	...
Kolába	...	...	38	874	1	31	22	419	6	182	3	195
Total, Central Circle ...	4	1,338	115	8,698	19	16,277	86	9,832	10	555	3	195
SOUTHERN CIRCLE.												
Kánara, Northern ...	1	300	5	7,408	1	1,205	15	2,234	2	159	...	...
Do. Eastern	...	...	...	...	2	1,040	3	123	...	...	...	...
Do. Central	...	...	14	789	7	364	69	5,071	...	...	...	...
Do. Southern	...	...	...	...	...	...	27	887	...	...	...	...
Do. Western	...	...	...	...	...	...	1	3	...	...	...	...
Belgaum	...	...	70	4,997	1	1	39	5,730	7	53	...	...
Dhárwár-Bijápur	1	2	12	832	...	...	11	1,273	...	...	...	...
Total, Southern Circle ...	2	302	101	14,026	11	2,610	165	15,321	9	212	...	...
SIND CIRCLE.												
Sukkur	...	...	...	...	10	309	4	66	...	...	...	...
Shikarpur	...	...	...	...	...	...	20	450	...	...	...	...
Lárkána	...	...	2	5	1	2	...	...	...	...	...	...
Hyderabad	...	...	...	...	...	...	...	...	...	...	...	...
Karachi	2	3	...	...	3	142	4	30	...	...	...	...
Total, Sind Circle ...	2	3	2	5	14	453	28	546	...	...	...	...
GRAND TOTAL, PRESIDENCY...	50	7,297	250	26,825	60	22,454	365	31,748	37	1,976	3	195

Forest Fires during 1919-20.

Reserve or fire-traced Area.												
By Intentional Firing.								Causes Unknown.		Total (A), (B) and (C).		Remarks.
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.						
No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	
14	15	16	17	18	19	20	21	22	23	24	25	26
...	...	...	...	...	...	22	646	85	11,790	117	12,526	
...	...	...	...	...	...	6	328	...	...	7	478	
...	...	1	350	...	...	8	901	25	2,475	37	3,716	
...	...	...	...	...	...	3	372	39	3,763	61	6,627	
...	...	...	...	...	...	30	4,845	118	13,422	165	20,952	
...	...	13	2,067	5	379	56	5,712	4	81	76	6,525	
...	...	...	...	...	...	7	125	16	1,772	25	2,502	
...	...	...	...	...	...	7	239	26	1,405	38	4,300	
...	...	14	2,417	5	379	139	13,168	313	34,708	526	57,626	
3	400	...	...	...	...	26	5,268	30	4,861	*69	12,950	*Includes 10 cases not accounted for in form No. 13.
...	...	...	...	...	...	7	1,805	82	40,887	91	42,704	
...	...	3	650	...	...	17	18,320	38	41,219	61	64,664	
...	...	3	652	4	132	36	2,036	147	7,496	210	†10,239	†This area does not agree with that shewn in form No. 14 as the latter is the area under actual protection and this is for the whole of the Division.
...	...	...	...	...	...	13	437	61	1,365	107	2,299	
...	...	7	101	...	...	39	928	24	660	101	2,462	
3	400	13	1,403	4	132	138	28,794	382	96,488	639	135,318	
5	1,600	30	3,191	...	...	53	8,389	35	26,428	94	42,525	
...	...	1	20	...	...	6	1,183	121	74,774	127	75,957	
6	769	...	...	5	354	87	6,558	176	8,158	277	15,505	
40	2,665	...	...	7	442	74	3,994	87	5,230	161	9,224	
2	30	...	...	...	...	3	33	76	3,517	79	3,550	
41	4,737	...	...	65	5,284	153	15,805	...	...	223	20,802	
...	...	...	..	1	156	12	1,429	28	4,495	53	6,758	
94	9,801	31	3,211	78	6,236	388	37,391	523	122,602	1,014	174,321	
5	194	...	...	2	80	21	649	20	676	41	1,325	
...	...	...	...	...	...	20	450	...	...	20	450	
...	...	...	...	...	...	1	2	18	211	21	218	
...	...	...	...	...	...	...	...	4	73	4	73	
4	138	...	...	...	...	11	310	2	17	15	330	
9	332	...	...	2	80	53	1,411	44	977	101	2,396	
106	10,533	50	7,031	89	6,827	718	80,764	1,262	254,775	2,280	369,661	

FORM No. 15A.—*Statement showing the forest areas continuously immune from fire for a period of seven years.* (*G. R., R. D., No. 248, dated 12th January 1904.*)

Division.	Total forest area of the Division in charge of the Forest Department.	Extent of valuable forest for which continuous protection from fire is desirable.	Proportion of valuable forest which has been continuously protectad from fire for seven years.	Extent of forest naturally immune from fire.	Extent of forest burnt during the year.		
					Open forest.	Closed forest.	Total.
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.	Acres.	Acres.	Acres, per cent.	Acres.	Acres.	Acres.	Acres.
Panch Mahals	212,152	212,152	172,522 or 81·3	.....	9,172	13,355	12,526
Surat	463,507	463,507	453,120 or 97·7	.....	478	.....	478
North Thána	221,737	221,737	196,062 or 88·4	.....	1,980	1,736	3,716
West do.	192,652	184,846	*169,205 or 91·5	1,500	4,412	2,215	6,627
East do.	293,218	280,527	*218,678 or 77·9	4,356	9,327	11,625	20,952
West Násik	221,179		Figures	not available.			6,525
North do.	316,195	275,102	268,324 or 97·1	49,920	1,563	939	2,502
East do.	165,148	165,148	125,580 or 76·0	.....	3,278	1,022	4,300
Total, Northern Circle ...	2,085,788	.....	.....	.....	.....	.....	57,626
CENTRAL CIRCLE.							
East Khándesh			Figures	not abailable.			
North do.				Do.			
West do.	396,802	221,430	.....	.....	36,314	6,390	42,704
Poona	363,310	274,418	88,892 or 89·2	.....	.....	10,239	10,239
Sátára	330,987	323,871	.....	.....	1,229	1,069	2,298
Kolába	269,666	269,666	251,902 or 93·4	5,553	1,759	703	2,462
Total, Central Circle ...	.....	.....	.....	.....	.....	.....	.....
SOUTHERN CIRCLE.							
Kánara Northern	273,066	273,066	31,634 or 11·5	500	10,009	32,516	42,525
Do. Eastern	377,070	375,000	165,000 or 46·6	6,000	14,415	61,542	75,957
Do. Central	521,649	492,977	135,801 or 27·5	4,233	14,704	800	15,505
Do. Southern	464,651	200,000	200,000	109,180	9,124	100	9,224
Do. Western	530,156	130,808	90,238 or 68·9	52,994	2,364	1,186	3,550
Belgaum	435,611	435,611	347,003 or 79·6	48,500	11,687	9,115	20,802
Dhárwár-Bijápur	230,749	212,131	167,505 or 78·9	2,297	5,524	1,234	6,758
Total, Southern Circle ...	2,832,952	2,119,593	1,137,181 or 53·6	223,704	67,827	106,493	174,321
SIND CIRCLE.							
Sukkur	215,564	215,564	214,239 or 99·3	.....	1,016	309	1,325
Shikárpur	106,558	106,558	106,108 or 99·6	.....	180	270	450
Lárkana	109,784	109,784	103,030 or 93·8	.....	218	.....	218
Hyderabad	154,238	154,238	153,313 or 99·4	.....	73	.....	73
Karáchi	140,438	140,438	138,627 or 99·0	.....	310	20	330
Total, Sind Circle ...	726,582	726,582	715,317 or 99·9	.....	1,797	599	2,396

* These figures relate to four years.

FORM No. 16.—*Area closed and open to grazing during 1919-1920.*

Division.	AREA IN SQUARE MILES.						Remarks.
	Closed to all animals.		Open to grazing.				
			Of all animals.		Of all animals except browsers (camels, sheep, etc.,).		
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year.	
1	2	3	4	5	6	7	8
	Sq.m.	Sq.m.	Sq.m.	Sq.m.	Sq.m.	Sq.m.	
NORTHERN CIRCLE.							
Panch Mahâls	75	19	.....	.....	237	.....	
Surat	17	51	338	.....	.....	331	
North Thâna	66	.....	149	.....	280	.....	
West do.	56	.....	89	.....	245	.....	
East do.	108	.....	142	.....	350	.....	
West Nâsik	58	8	102	.....	280	.....	
North do.	82	.....	254	.....	183	.....	
East do.	11	1	102	.....	182	.....	
Ahmedabad	.....	.....	19	.....	.....	.....	
Total, Northern Circle ...	473	79	1,195	.....	1,757	331	
CENTRAL CIRCLE.							
East Khándesh	212	58	36	.....	494	.....	
West do.	99	.....	177	.....	521	.....	
North do.	114	.....	.....	.....	755	.....	
Poona	29	57	424	.....	482	.....	
Sátára	45	.....	195	.....	472	.....	
Kolába	61	1	102	.....	360	.....	
Ahmednagar-Sholápur	.....	.....	698	.....	.....	.....	
Total, Central Circle ...	560	116	1,632	.....	3,084	.....	
SOUTHERN CIRCLE.							
Kánara, Northern	237	.....	2	.....	188	.....	
Do. Eastern	266	.....	.....	.....	327	.....	
Do. Central	444	.....	.....	.....	371	.....	
Do. Southern...	135	.....	.....	.....	591	.....	
Do. Western	264	.....	.....	.....	564	.....	
Belgaum	152	.....	3	.....	528	.....	
Dhárwár-Bijápur	18	6	159	.....	311	.....	
Ratnágiri	.....	.....	19	.....	.....	.....	
Total, Southern Circle ...	1,516	6	183	.....	2,880	.....	
SIND CIRCLE.							
Sukkur	38	.....	182	.....	117	.....	
Shikárpur...	15	.....	58	.....	94	.....	
Lárkána	5	.....	44	.....	122	.....	
Hyderabad...	23	.....	99	.....	119	.....	
Karachi	1	.....	103	.....	115	.....	
Total, Sind Circle ...	82	.....	486	.....	567	.....	
GRAND TOTAL, PRESIDENCY ...	2,631	201	3,496	.....	8,288	331	

FORM No. 17.—*Return of Grazing*

Division.	Grazing on Payment—Number of Animals.												
	At full rates.						At privileged rates.						
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Fees received.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Fees received. Actual.	Fees received. Value at full rates.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
						Rs. a. p.						Rs. a. p.	Rs. a. p.
NORTHERN CIRCLE.													
Reserved Forests.													
Panch Mahâls ...	796	1,844	...	...	...	1,718 0 0	457	1,873	...	...	...	320 0 0	1,393 0 0
Surat ...	...	...	...	...	...	.....	198	405	...	...	...	75 0 0	400 0 0
North Thâna ...	...	25	...	...	...	16 0 0	7	126	...	...	...	25 0 0	88 0 0
West do. ...	108	624	...	...	...	525 0 0	745	3,917	...	...	...	1,601 0 0	3,379 0 0
East do. ...	142	4,333	4	...	...	2,886 0 0	3,223	13,688	...	...	...	3,499 0 0	12,584 0 0
West Násik ...	43	105	...	...	...	148 0 0	6,247	31,682	...	...	...	5,234 0 0	38,077 0 0
North do. ...	10	183	...	...	171	364 0 0	8,615	71,659	52,882	...	855	16,205 0 0	94,817 0 0
East Násik ...	6	128	173	...	62	239 0 0	3,049	32,936	38,796	...	408	8 717 0 0	45,262 0 0
Total, ...	1,105	7,242	177	...	233	5,896 0 0	22,541	156,286	91,678	...	1,263	35,676 0 0	19,600 0 0
Protected Forests.													
North Thâna ...	...	...	...	...	...	.....	...	...	...	...	...	.....	.....
West Thâna ...	...	...	...	...	...	.....	...	...	16	...	...	2 0 0	4 0 0
Total ...	...	...	...	...	...	.....	...	...	16	...	...	2 0 0	4 0 0
Leased Forests.													
Surat ...	449	2,475	...	...	16	2940 0 0	...	...	...	...	...	.....	.....
Total, Northern Circle ...	1,554	9,717	177	...	249	8,836 0 0	22,541	156,286	91,694	...	1,263	35,678 0 0	1,96,004 0 0
CENTRAL CIRCLE.													
Reserved Forests.													
East Khándesh ...	1,732	21,269	...	23	600	23,624 0 0	27,462	148,525	3,313	...	161	25,013 0 0	1,79,461 0 0
West do. ...	237	3,113	...	...	1,082	4,482 0 0	9,774	78,173	48,185	...	1,021	17,961 0 0	1,37,153 0 0
North do. ...	3,087	32,978	...	...	2,574	38,639 0 0	6,771	31,378	...	...	147	5,657 0 0	38,296 0 0
Poona ...	...	51	...	...	...	51 0 0	14,274	84,234	32,922	...	548	16,781 0 0	1,31,978 0 0
Sátára ...	...	...	...	...	...	.....	22,844	72,265	...	...	320	12,679 0 0	95,429 0 0
Kolába ...	20	10	...	...	4	34 0 0	11,596	57,510	80	...	...	10,155 0 0	69,186 0 0
Total ...	5,126	57,421	...	23	4,260	66,830 0 0	92,721	472,085	84,500	...	2,197	88,246 0 0	6,51,503 0 0
Protected Forests.													
Sátára ...	...	...	...	...	...	.....	...	...	...	...	...	.....	.....
Unclassed Forests.													
Sátára ...	...	...	...	...	...	.....	...	...	...	...	...	.....	.....
Leased Forests.													
Sátára ...	...	...	...	...	...	.....	432	1,558	...	...	...	251 0 0	1,990 0 0
Total, Central Circle ...	5,126	57,421	...	23	4,260	66,830 0 0	93,153	473,643	84,500	...	2,197	88,497 0 0	6,53,493 0 0
SOUTHERN CIRCLE.													
Reserved Forests.													
Kánara, Northern ..	531		...	...	...	531 0 0	27,930		...	...	...	4,367 0 0	27,930 0 0
Do. Eastern ...	748		...	...	...	748 0 0	35,565		26	...	...	4,990 0 0	35,571 0 0
Do. Central ...	653		...	...	...	653 0 0	39,909		...	...	...	7,136 0 0	39,909 0 0
Do. Southern ...	...		...	...	...	.....	71,828		...	...	...	9,708 0 0	71,828 0 0
Do. Western ...	...		...	...	...	.....	29,633		...	...	...	5,846 0 0	29,633 0 0
Belgaum ...	...		...	...	...	.....	46,766		12,097	...	...	10,948 0 0	49,790 0 0
Dhárwár-Bijápur ...	668		...	...	1	669 0 0	54,423		19,490	...	1,170	8,493 0 0	65,208 0 0
Total, Southern Circle ...	2,600		...	...	1	2,601 0 0	306,054		31,613	...	1,170	51,488 0 0	3,19,869 0 0
SIND CIRCLE.													
Reserved Forests.													
Sukkur ...	3,566	5,609	20,032	106	136	9,079 0 0	...	...	...	...	...	.....	.....
Shikarpur ...	2,237	2,828	12,419	269	10	4,865 0 0	...	...	...	...	...	.....	.....
Lárkána ...	4,691	2,636	10,607	184	...	5,915 0 0	...	...	...	...	...	.....	.....
Hyderabad ...	3,148	3,422	21,272	214	28	9,084 0 0	...	...	...	...	...	.....	.....
Kárachi ...	3,617	2,434	7,507	576	88	6,803 0 0	...	...	...	...	...	.....	.....
Total, Sind Circle ...	17,259	16,929	71,837	1,349	262	35,746 0 0	...	...	...	...	...	.....	.....
GRAND TOTAL PRESIDENCY ...	110,603		72,014	1,372	4,772	1,14,013 0 0	1,051,677		208,157	...	4,630	1,75,663 0 0	11,69,366 0 0

the State Forests during 1919-1920.

GRAZING FREE—NUMBER OF ANIMALS.													
By right under Settlement.						During pleasure of Government, or otherwise than under Settlement.						Total Value of Fees at full rates.	Grand Total of Value at full rates.
Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Value of Fees at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Value of Fees at full rates.		
15	16	17	18	19	20	21	22	23	24	25	26	27	28
					Rs. a. p.						Rs. a. p.	Rs. a. p.	Rs. a. p.
...	...	...	...	...	.....	24,076	126,139	...	...	...	87,146 0 0	87,146 0 0	90,257 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	400 0 0
...	...	...	...	...	.....	9,600	50,176	...	...	...	43,360 0 0	43,360 0 0	43,464 0 0
...	...	...	...	...	.....	19,329	67,503	...	...	...	66,351 0 0	66,351 0 0	70,255 0 0
...	...	...	...	...	.....	13,974	60,237	...	...	...	55,116 0 0	55,116 0 0	70,586 0 0
7,937	18,763	...	...	...	26,700 0 0	...	...	...	...	...	.....	26,700 0 0	64,925 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	95,181 0 0
...	...	...	...	...	.....		...	...	...	...	.....	.....	45,501 0 0
7,937	18,763	...	...	...	26,700 0 0	66,979	304,055	...	...	...	2,51,973 0 0	2,78,673 0 0	4,80,569 0 0
...	...	...	...	...	.....	14,604	55,930	...	...	...	53,211 0 0	53,211 0 0	53,211 0 0
...	...	...	...	...	.....	3,306	12,746	...	...	29	12,117 0 0	12,117 0 0	12,121 0 0
...	...	...	...	...	.....	17,910	68,676	...	...	29	65,328 0 0	65,328 0 0	65,332 0 0
...	...	...	...	...	.....	1,719	25,551	4,217	...	71	31,558 0 0	31,558 0 0	34,498 0 0
7,937	18,763	...	...	...	26,700 0 0	86,608	398,282	4,217	...	100	3,48,859 0 0	3,75,559 0 0	5,80,399 0 0
...	...	...	...	...	.....	1,748	6,504	...	...	14	8,266 0 0	8,266 0 0	2,11,351 0 0
...	...	...	...	...	.....	1,358	17,105	...	...	30	18,493 0 0	18,493 0 0	1,60,128 0 0
...	...	...	...	...	.....	2,021	15,886	...	...	15	17,922 0 0	17,922 0 0	94,857 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	1,32,029 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	95,429 0 0
...	...	...	...	...	.....	931	2,209	...	...	...	3,140 0 0	3,140 0 0	72,360 0 0
...	...	...	...	...	.....	6,058	41,704	...	...	59	47,821 0 0	47,821 0 0	7,66,154 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	.....
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	.....
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	1,990 0 0
...	...	...	...	...	.....	6,058	41,704	...	...	59	47,821 0 0	47,821 0 0	7,68,144 0 0
...	...	...	...	...	.....	4,319		...	...	...	4,319 0 0	4,319 0 0	32,780 0 0
...	...	...	...	...	.....	264		...	...	...	264 0 0	264 0 0	36,583 0 0
...	...	...	...	...	.....	23,901		...	...	...	23,901 0 0	23,901 0 0	64,463 0 0
...	...	...	...	...	.....	.....		...	...	...	.....	.....	71,828 0 0
...	...	...	...	...	.....	13,930		...	...	...	13,930 0 0	13,930 0 0	43,563 0 0
...	...	...	...	...	.....	18,108		...	...	...	18,108 0 0	18,108 0 0	67,898 0 0
...	...	...	...	...	.....	89,939		...	...	...	89,939 0 0	89,939 0 0	1,55,816 0 0
...	...	...	...	...	.....	150,461		...	...	...	1,50,461 0 0	150,461 0 0	4,72,931 0 0
560	2,150	...	...	30	1,237 0 0	42	1,109	...	...	1,765	909 0 0	2,146 0 0	11,225 0 0
258	1,000	...	...	5	285 0 0	8	1,197	...	...	1,450	570 0 0	855 0 0	5,720 0 0
658	1,792	...	...	...	606 0 0	62	64	...	...	185	117 0 0	723 0 0	6,638 0 0
9	297	...	...	...	118 0 0	105	542	350	899	1,402	3,308 0 0	3,426 0 0	12,510 0 0
256	163	...	...	...	254 0 0	330	781	43	20	2,010	1,107 0 0	1,361 0 0	8,164 0 0
1,741	5,402	...	...	35	2,500 0 0	547	3,693	393	919	6,812	6,011 0 0	8,511 0 0	44,257 0 0
9,678	24,165	...	...	35	29,200 0 0	687,353		4,610	919	6,971	5,53,152 0 0	5,82,352 0 0	18,65,731 0 0

FORM No. 18.—*Artificial Reproduction in the Bombay Presidency, including Sind, during the year 1919-1920.*

Division.	Kind of Plantation.	Area in Acres.				Expenditure during the Year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.	Remarks.
		On 1st July 1919.	Added during the year.	Excluded during the year.	Area on 30th June 1920.	Creation.	Upkeep.	Creation.	Upkeep.			
1	2	3	4	5	6	7	8	9	10	11	12	13
						Rs.	Rs. a. p.	Rs.	Rs.	Rs.	Rs.	
NORTHERN CIRCLE.												
North Thána ...	Regular plantations.	115	25	...	140	9,556	.....	23,290	11	111	272	
CENTRAL CIRCLE.												
Kolába ...	Regular plantations...	114	1	1	114	477	414 0 0	3,225	3,717	1,017	4,285	
Sátára ...	Do. ...	268	...	268	...	...	.....	...	...	...	...	
East Khándesh ...	Do. ...	248	...	248	...	...	.....	...	...	...	...	
	Total ...	630	1	517	114	477	414 0 0	3,225	3,717	1,017	4,285	
SOUTHERN CIRCLE.												
Kánara Central ...	Regular plantations .	180	...	...	180	...	852 0 0	2,318	13,636	272	2,070	*The difference of 132 is due to rectification. Last year's figures are rectified in this form by obtaining correct particulars from the Divisional Forest Officers.
Do. Southern.	Do. ...	581	...	...	581	...	610 0 0	68,693	5,285	1,740	25,826	
Do. Western...	Do. ...	*224	...	...	224	...	5,114 0 0	21,713	3,625	2,741	19,578	
Belgaum ...	Do. ...	6	...	...	6	...	.....	36	78	...	...	
Dhárwár-Bijápur.	Do. ...	10	...	...	10	...	.....	43	...	32	592	
	Total ...	*1,001	...	...	1,001	...	6,576 0 0	92,803	22,624	4,785	48,066	
Kánara Eastern .	Taungya ...	30	87	...	117	3,129	342 0 0	5,101	342	638	638	
Do. Southern.	Do. ...	157	265	...	422	...	.....	...	...	...	...	
	Total ...	187	352	...	539	3,129	342 0 0	5,101	342	638	638	
Kánara Northern.	Other forms of artificial reproduction.	66	222	...	288	4,732	.....	6,683	...	...	...	
Do. Central .	Do.	63	126	...	189	1,804	.....	2,647	...	...	...	
Do. Southern.	Do. ...	177	255	...	432	2,550	.....	4,320	...	...	...	
Do. Western.	Do. ...	73	84	...	157	5,860	1,299 0 0	8,270	1,599	...	...	
Belgaum ...	Do. ...	8	25	...	33	472	.....	995	...	...	...	
	Total ...	387	712	...	1,099	15,418	1,299 0 0	22,915	1,599	...	...	
	Total, Southern Circle	1,575	1,064	...	2,639	18,547	8,217 0 0	1,20,819	24,565	5,423	48,704	
SIND CIRCLE.												
Sukkur ...	Regular plantations...	136	197	10	323	...	1,126 0 0	834	20,510	11,925	23,290	
Shikárpur ...	Do. ...	107	1	9	99	...	273 0 0	1,361	3,526	...	...	
Lárkána ...	Do. ..	16	1	...	17	...	211 0 0	54	2,759	...	...	
Hyderabad ...	Do. ..	33	...	25	8	...	.....	325	893	...	...	
Karáchi ...	Do. ...	22	...	...	22	...	511 0 0	494	5,966	85	89	
	Total ...	314	199	44	469	...	2,121 0 0	3,068	33,554	12,010	23,379	
Sukkur ...	Other forms of artificial reproduction.	4,549	5,429	2,946	7,032	...	.....	806	...	...	...	
Shikárpur ..	Do. ...	1,825	1,074	1,979	920	301	.....	301	...	...	...	
Larkána ...	Do. ...	1,171	3,482	4,587	66	202	.....	206	...	...	...	
Hyderabad ...	Do. ...	6,856	3,134	...	9,990	5,098	.....	9,380	...	...	...	
Karáchi ...	Do. ...	18,027	5,498	5,613	17,982	3,478	.....	4,274	...	...	10	
	Total ...	32,498	18,617	15,125	35,990	9,079	.....	14,987	...	...	10	
	Total, Sind Circle ...	32,812	18,816	15,169	36,459	9,079	2,121 0 0	18,035	33,554	12,010	23,389	
GRAND TOTAL, PRESIDENCY.	Regular plantations...	2,060	225	561	1,724	10,033	9,111 0 0	1,22,386	59,906	17,923	76,002	
	Taungyas ...	187	352	...	539	3,129	342 0 0	5,101	342	638	638	
	Other forms of artificial reproduction.	32,885	19,329	15,125	37,089	24,497	1,299 0 0	37,882	1,599	...	10	
	Total ...	35,132	19,906	15,686	39,352	37,659	10,752 0 0	1,65,369	61,847	18,561	76,650	

N.B.—The classification of expenditure between creation and upkeep as reported last year was found to be wrong hence the change.

FORM No. 19.

FORM No. 19.—*Outturn (thousands of cubic feet, solid) of Timber and*

Division.	Timber in the rough, Logs.					Timber in the rough, Poles.					Sawn or Square Timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	C. ft.	C. ft.	C. ft.	C.ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C.ft.	C. ft.	C.ft.	C.ft.	C. ft.
NORTHERN CIRCLE.															
Reserved Forests.															
Panch Mahâls	...	9	...	...	9	...	180	...	...	180	...	...	...	...	...
Surat	...	11	...	...	11	1	75	2	...	78	...	...	...	..	...
North Thâna	5	29	...	...	34	95	565	...	...	660	...	...	...	...	...
West Thâna	...	23	...	...	23	4	155	...	...	159	...	15	...	...	15
East Thâna	...	3	...	...	3	8	115	...	...	123	...	17	...	...	17
West Násik	...	116	...	...	116	1	102	1	...	104	...	...	...	...	...
North Násik	...	...	...	...	...	...	123	3	...	126	...	...	...	...	...
East Násik	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Total, Reserved Forests ...	5	191	...	...	196	109	1,316	6	...	1,431	...	32	...	...	32
Protected Forests.															
North Thâna	...	13	...	...	13	...	111	...	...	111	...	...	...	...	...
West Thâna	...	17	...	...	17	...	19	...	...	19	...	3	...	...	3
East Thâna	...	...	...	...	...	1	22	...	...	23	...	7	...	...	7
West Násik	6	39	...	...	45	9	9	...	...	18	..	...	...	...	...
Total, Protected Forests ...	6	69	...	...	75	10	161	...	...	171	...	10	...	...	10
Leased Forest.															
Surat	23	124	...	...	147	...	8	2	...	10	46	...	...	...	46
Total, Northern Circle ...	34	384	...	...	418	119	1,485	8	...	1,612	46	42	..	...	88

Fuel during the year 1919-1920, and Agency of Exploitation.

Miscellaneous.					Total Timber.					Fuel.					Total Outturn.
Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
...	...	...	...	...	...	189	...	...	189	...	649	...	1,467	2,116	2,305
...	...	...	...	...	1	86	2	...	89	...	119	...	6	125	214
1	36	...	...	37	101	630	...	...	731	187	985	...	1,104	2,276	3,007
19	7	...	...	26	23	200	...	...	223	68	913	..	542	1,523	1,746
...	...	...	...	...	8	135	...	...	143	37	893	...	917	1,847	1,990
...	...	...	...	...	1	218	1	...	220	1	128	...	1,715	1,844	2,064
...	...	...	...	...	...	123	3	...	126	9	131	...	...	140	266
...	1	...	...	1	...	2	...	...	2	...	37	...	...	37	39
20	44	...	...	64	134	1,583	6	...	1,723	302	3,855	...	5,751	9,908	11,631
...	16	...	...	16	...	140	...	...	140	...	219	...	500	719	859
...	3	...	...	3	...	42	...	...	42	...	22	...	112	134	176
...	1	...	...	1	1	30	...	...	31	...	22	...	...	22	53
...	...	...	...	...	15	48	...	...	63	...	...	...	...	...	63
...	20	...	...	20	16	260	...	...	276	...	263	...	612	875	1,151
...	...	...	...	...	69	132	2	...	203	11	...	...	165	176	379
20	64	...	...	64	219	1,975	8	...	2,202	313	4,118	...	6,528	10,959	13,161

FORM No. 19.—*Outturn (in thousands of cubic feet, solid) of Timber and*

Division.	Timber in the rough, Logs.					Timber in the rough, Poles.					Sawn or Squared Timber.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	C. ft.	C. ft.	C. ft.	C.ft.	C. ft.	C. ft.	C. ft.	C. ft.	C.ft.	C. ft.	C. ft.	C. ft.	C.ft.	C.ft.	C. ft.
CENTRAL CIRCLE.															
Reserved Forests.															
East Khándesh	...	...	...	...	...	1	66	1	...	68	...	..	...	...	...
West Khándesh	...	23	...	...	23	1	75	3	...	79	...	...	...	...	...
North Kándesh	3	3	...	...	6	...	86	..	...	86	...	2	...	...	2
Poona	...	10	...	...	10	3	127	2	...	132	...	...	...	...	...
Kolába	...	11	...	...	11	...	149	7	...	156	...	...	...	...	...
Sátára	...	1	...	...	1	...	8	3	...	11	...	...	...	...	...
Total, Central Circle ...	3	48	...	...	51	5	511	16	...	532	...	2	...	...	2

Fuel during the year 1919-1920, and Agency of Exploitation—continued.

Miscellaneous.					Total Timber.					Fuel.					Total.
Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
2	...	...	...	2	3	66	1	...	70	2	361	...	23	386	456
.....	..	...	...	.....	1	98	3	...	102	...	318	2	15	335	437
.....	6	...	...	6	3	97	...	...	100	...	456	...	11	467	567
..... Sandalwood— Kds. mds. lbs. 0 20 4 4 7 24	...	...	...	..... Sandalwood— Kds. mds. lbs. 5 0 0	3	137	2	...	142	173	299	1	...	473	615 Sandalwood— Kds. mds. lbs. 5 0 0
.....	26	...	...	26	...	186	7	...	193	38	857	...	705	1,600	1,793
..... Sandalwood— Kds. mds. lbs. 21 8 24	2	...	...	2 Sandalwood— Kds. mds. lbs. 21 8 24	....	11	3	...	14	237	10	...	...	247	261 Sandalwood— Kds. mds. lbs. 21 8 24 Table for Sandalwood. 28 lbs. = 1 md. 28 Mds. = 1 kd.
2 Sandalwood— Kds. mds. lbs. 22 1 0 4 7 24	34	...	...	36 Sandalwood— Kds. mds. lbs. 26 8 24	10	595	16	...	621	450	2,301	3	754	3,508	4,129 Sandalwood— Kds. mds. lbs. 26 8 24

FORM No. 19.—*Outturn (in thousands of cubic feet, solid) of Timber and Fuel*

Division.	Timber in the rough, Logs.					Timber in the rough, Poles.				
	Government.	Purchasers.	Free Grantees	Right-holders.	Total.	Government.	Purchasers.	Free Grantees	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Reserved forests.										
Kánara, Northern	265	278	...	...	543	11	216	1	...	228
Kánara, Eastern	220	113	4	...	337	21	191	1	..	213
Kánara, Central	450	59	2	...	511	3	3	1	...	7
Kánara, Southern	78	30	1	...	109	5	...	1	...	6
Kánara, Western	115	19	8	...	142	24	1	...	...	25
Belgaum	30	85	...	...	115	12	67	9	...	88
Dhárwár-Bijápur	...	...	...	...	...	...	23	...	...	23
Total, Southern Circle ...	1,158	584	15	...	1,757	76	501	13	...	590

Sawn or Square Timber.					Miscellaneous.		
Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.
12	13	14	15	16	17	18	19
C. ft.	C. ft.	C.ft.	C.ft.	C. ft.		C. ft.	
109	...	...	...	109	..... Sandalwood— Kds. mds. lbs. 23 0 0 56 pieces. 2 chips carts.	.....	.....
71	...	...	...	71	..... Sandalwood— Kds. mds. lbs. 41 0 0	.....	.....
43	...	...	...	43	..... Sandalwood— Kds. mds. lbs. 23 0 0	.....	.....
1	...	...	...	1	..... Sandalwood— Kds. mds. lbs. 11 0 0	.....	.....
29	....	...	...	29	.....	3	.....
3	...	...	...	3	..... Sandalwood— Kds. mds. lbs. 42 0 0 40 chips carts. 14 chips heaps.	.....	.....
...	...	...	...	...	..... Sandalwood— Kds. mds. lbs. 27 0 0 38 rejected.	.....	.....
256	...	...	...	256	..... Sandalwood— Kds. mds. lbs. 167 0 0 38 rejected 56 pieces. 42 chips carts. 14 chips heaps.	3	.....

Miscellaneous—*continued.*		Total Timber.		
Right-holders	Total.	Government.	Purchasers.	Free Grantees.
20	21	22	23	24
	C. ft.	C. ft.	C. ft.	C. ft.
.....	.....	385	494	1
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	23 0 0	23 0 0		
	56 pieces.	56 pieces.		
	2 chips carts.	2 chips carts.		
.....	.....	312	304	5
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	41 0 0	1 0 0		
.....	.....	496	62	3
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	23 0 0	23 0 0		
.....	.....	84	30	2
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	11 0 0	11 0 0		
.....	3	168	23	8
.....	.....	45	152	9
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	42 0 0	42 0 0		
	40 chips carts.	40 chips carts.		
	14 chips heaps.	14 chips heaps.		
.....	.....	.....	23	.....
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	27 0 0	27 0 0		
	38 rejected.	38 rejected.		
.....	3	1,490	1,088	28
	Sandalwood—	Sandalwood—		
	Kds. mds. lbs.	Kds. mds. lbs.		
	167 0 0	167 0 0		
	38 rejected.	38 rejected.		
	56 pieces.	56 pieces.		
	42 chips carts.	42 chips carts.		
	14 chips heaps.	14 chips heaps.		

during the year 1919-1920 and Agency of Exploitation—continued.

Total Timber—*continued.*		Fuel.					
Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Total Outturn.
25	26	27	28	29	30	31	32
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	880 Sandalwood— Kds. mds. lbs. 23 0 0 56 pieces, 2 chips carts.	162	473	...	...	635	1,515 Sandalwood— Kds.. mds. lbs. 23 0 0 56 pieces. 2 chips carts.
.....	621 Sandalwood— Kds. mds, lbs. 41 0 0	49	135	33	...	217	838 Sandalwood— Kds. mds. lbs. 41 0 0
.....	561 Sandalwood— Kds. mds. lbs. 23 0 0	...	519	13	...	532	1,093 Sandalwood— Kds. mds. lbs. 23 0 0
.....	116 Sandalwood— Kds. mds. lbs. 11 0 0	74	546	3	...	623	739 Sandalwood— Kds. mds. lbs. 11 0 0
.....	199	920	123	3	...	1,046	1,245
.....	206 Sandalwood— Kds. mds. lbs. 42 0 0 40 chips carts. 14 chips heaps.	3,182	1,028	...	...	4,210	4,416 Sandalwood— Kds. mds. lbs. 42 0 0 40 chips carts. 14 chips heaps.
.....	23 Sandalwood— Kds. mds. lbs. 27 0 0 38 rejected.	7	384	...	...	391	414 Sandalwood— Kds. mds. lbs. 27 0 0 38 rejected.
.....	2,606 Sandalwood— Kds. mds. lbs. 167 0 0 38 rejected. 56 pieces. 42 chips carts. 14 chips heaps.	4,394	3,208	52	...	7,654	*10,260 Sandalwood— Kds. mds. lbs. 167 0 0 38 rejected. 56 pieces. 42 chips carts. 14 chips heaps.

* This is exclusive of 300 thousand c. ft. of timber and 3,042 thousand c. ft. of fuel shown under "privilege holders" in chapter II, section V (*c*)—"Outturn and sources of forest produce"—Figures under "Government and Free Grantees" are actuals—Figures under "Purchasers" are estimates arrived at from contractors' records.

FORM No. 19.—*Outturn (in thousands of cubic feet, solid) of Timber and Fuel*

Division.	Timber in the rough, Logs.					Timber in the rough, Poles.				
	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
SIND CIRCLE.										
Sukkur	4	57	...	...	61	...	36	...	...	36
Shikárpur	...	2	...	...	2	1	9	1	...	11
Lárkána	...	6	...	...	6	...	26	...	...	26
Hyderabad	...	9	...	...	9	...	13	...	...	13
Karáchi	1	79	1	...	81	...	18	...	...	18
Total, Sind Circle ...	5	153	1	...	159	1	102	1	...	104
GRAND TOTAL, PRESIDENCY ..	1,200	1,169	16	...	2,385	201	2,599	38	...	2,838

Sawn or Square Timber.					Miscellaneous.		
Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.
12	13	14	15	16	17	18	19
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
...	...	...	...	...	.....	.....	.....
...	...	...	...	...	.....	.....	.....
...	...	...	...	...	.....	10	.....
...	...	...	...	...	11	.....	.....
...	...	...	...	...	.....	.....	.....
...	...	...	...	...	11	10	.....
302	44	..	...	346	33	111	.....
		Sandalwood		khandies ...	189	4	
			rejected	,, ...	88		
			pieces	,, ...	56		
			chips	carts ...	42		
			heaps		14		

Miscellaneous—*continued.*		Total Timber.		
Right-holders.	Total.	Government.	Purchasers.	Free Grantees.
20	21	22	23	24
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	.....	4	93	.....
.....	.....	1	11	1
.....	10	.....	42	.....
.....	11	12	22	.....
.....	.....	1	97	1
.....	21	18	265	2
.....	144	1,737	3,923	54
	193	167		
	38	38		
	56	56		
	42	42		
	14	14		

during the year 1919-1920 and Agency of Exploitation—concluded.

Total Timber—*continued.*		Fuel.					Total.
Right-holders.	Total.	Government.	Purchaser.	Free Grantees	Right-holders.	Total.	Outturn.
25	26	27	28	29	30	31	32
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	97	72	3,979	...	...	4,051	4,148
.....	13	11	1,375	4	...	1,390	1,403
.....	42	45	1,673	...	17	1,735	1,777
.....	34	504	4,306	1	3	4,814	4,848
.....	99	984	3,946	...	...	4,930	5,029
.....	285	1,616	15,279	5	20	16,920	17,205
.....	5,714 167 38 56 42 14	6,773	24,906	60	7,302	39,041	44,755 193 38 56 42 14

FORM No. 20.—*Outturn of Minor Forest Produce during the year 1919-1920.*

Description of Produce.	Produce removed or utilized.									
	By Government Agency.		By Purchasers.		By Free-grants.		By Right-holders.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.		Rs.		Rs.		Rs.		Rs.		Rs.
Reserved Forests.										
Apta Temburni leaves	.....	...	...	13,671	...	...	...	1,000	.....	14,671
Bámboos	.....	1,794	...	19,432	...	..	...	5,000	.....	26,226
Chilhari bark	.....	...	...	303	...	...	...	...	.....	303
Gum	... ..	...	...	1,339	...	...	...	...	.....	1,339
Rosha grass	.....	...	...	1,145	...	...	...	...	.....	1,145
Grass and grazing	.....	33,591	...	92,887	...	...	...	2,78,000	.....	4,04,478
Hirda	.....	...	...	3,208	...	...	...	...	.....	3,208
Karvi	.....	...	...	1,413	...	...	...	...	.....	1,413
Manure	.....	...	...	230	..	...	...	...	.....	230
Royalty on Managnese ore	.....	...	...	1,860	...	...	...	...	.....	1,860
Mhowra seed and flowers	.....	3,088	...	2,611	...	...	...	...	.....	5,699
Palm leaves	.....	...	...	1,041	...	...	...	...	.....	1,041
Stones	.....	...	...	236	...	...	...	...	.....	236
Tarwad bark and seed	... ..	...	...	19,506	...	...	...	...	.....	19,506
Thorns	.....	...	...	160	...	...	...	...	.....	160
Miscellaneous	... ..	...	...	1,947	...	...	...	18,000	.....	19,947
Total	.....	38,473	...	1,60989	...	...	...	3,02,000	.....	5,01,462
Protected Forests.										
Grass and grazing	.....	...	...	.....	...	...	...	65,000	.....	65,000
Miscellaneous	.....	...	...	80	...	...	...	7,000	.....	7,080
Total	.....	...	...	80	...	...	...	72,000	.....	72,080
Leased Forests.										
Asta Temburni leaves	.....	...	...	68	...	...	...	...	.....	68
Bamboos	.....	..	..	6,364	...	...	...	7,000	.....	13,364
Grass and grazing	.....	...	...	3,625	...	...	...	32,000	.....	35,625
Mhowra seed and flowers	.....	...	...	44	...	...	...	...	... ..	44
Miscellaneous	.....	...	...	1,227	...	...	..	14,000	.....	15,227
Total	.....	...	...	11,328	...	...	...	53,000	.....	64,328
Total, Northern Circle	.....	38,473	...	1,72,397	...	...	...	4,27,000	.....	6,37,870
CENTRAL CIRCLE.										
Reserved Forest.										
Hirda and Shikekái	.....	6,698	...	18,449	...	...	...	...	.....	25,147
Mhowra seed	.....	7,272	...	25	...	...	...	...	.....	7,297
Rosha grass	.....	...	...	5,927	...	...	...	...	.....	5,927
Leaves, pods, bark, etc.	.....	...	...	10,575	...	...	...	...	.....	10,575
Fruits	.....	...	...	3,582	...	...	...	2,500	.....	6,082
Earth, stone, murum, etc.	.....	...	...	2,169	...	570	...	...	...	2,739
Grass and Grazing	.....	...	...	3,28,823	...	...	...	21,472	.....	3,50,295
Bamboos	.....	19	...	12,415	...	94	...	...	.....	12,543
Tarwad	.....	...	...	7,895	...	...	...	...	.....	7,895
Aloe	.....	...	...	635	...	...	...	...	.....	635
Miscellaneous	.....	287	...	2,354	...	25	...	348	.....	3,014
Total	.....	14,276	...	3,92,849	...	689	...	24,320	.....	4,32,134
Leased Forests.										
Grass and Grazing	.....	...	...	248	...	...	...	...	.....	248
Total, Central Circle	.....	14,276	...	3,93,097	...	689	...	24,320	... ...	4,32,382

FORM No. 20.—*Outturn of Minor Forest Produce during the year 1919-1920*—continued.

Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
	By Government Agency.		By Purchasers.		By Free-grants.		By Right-holders.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE.— *Reserved Forests.*		Rs.		Rs.		Rs.		Rs.		Rs.
Bamboos	...	23,111	35,86,900	43,657	32,000	528	...	...	.....	67,296
Grass and Grazing	...	77,274	.....	57,459	...	...	...	...	.....	1,34,733
Harda, Shigekái, Honey, Wax, Cinnamon, Ramphal, Rampatri.	...	...	.....	21,278	...	...	...	...	.....	21,278
Pegs	...	...	.....	61	...	12	...	...	.....	73
Thorns	...	...	.....	225	...	10	...	...	.....	235
Prickly pear rafters	...	...	184	11	...	...	...	...	184	11
Ulpi sticks	...	...	.....	27	...	...	...	...	.....	27
Kajra seed	...	...	.....	70	...	...	...	...	.....	70
Hulgal seed	...	...	.....	2,035	...	...	...	...	.....	2,035
Tali seed	...	...	.....	189	...	...	...	...	.....	189
Fruit farm (Honne, Tamarind, etc.).	...	...	.....	77	...	...	...	...	.....	77
Cocoanuts	...	...	.....	27	...	...	...	...	.....	27
Baini trees	...	...	.....	12	...	...	...	...	.....	12
Tali trees and leaves	...	...	.....	4,174	...	...	...	...	.....	4,174
Tapping fees	...	...	.....	1,030	...	...	...	...	.....	1,030
Ichal leaves	...	...	.....	1	...	...	...	...	.....	1
Tumri leaves	...	...	.....	6,109	...	—	...	...	.....	6,109
Shindoli leaves	...	...	.....	46	...	...	...	...	.....	46
Green Soppu (leaves)	...	...	.....	14	...	...	...	...	.....	14
Matti bark	...	...	.....	4	...	...	...	...	.....	4
Tarwad bark	...	...	.....	8,232	...	...	...	...	.....	8,232
Cane	...	...	.....	711	...	234	...	...	.....	945
Karvi	...	...	.....	227	...	...	...	...	.....	227
Creepers	...	...	.....	17	...	10	...	...	.....	27
Broom grass	...	...	.....	805	...	...	...	...	.....	805
Tarvatgi	...	...	.....	150	...	...	...	...	.....	153
Ragi	...	638	.....	.....	...	...	...	...	.....	678
Shave farm	...	...	.....	76	...	...	...	...	.....	80
Karanj seed	...	...	.....	1,202	...	...	...	...	.....	1,262
Gum farm	...	...	.....	885	...	...	...	...	.....	815
Wawading	...	...	.....	50	...	...	...	...	.....	55
Taikila seed	...	...	.....	55	...	...	...	...	.....	50
Chandrapit	...	...	.....	250	...	...	...	...	.....	297
Bábul pods	...	...	.....	697	...	...	...	...	.....	661
Banadurbi	...	...	.....	361	...	...	...	...	.....	311
Quarrying fees	...	...	.....	4,797	...	14	...	...	.....	4,860
Stones	...	...	...	754	...	206	...	...	.....	972
Metal	...	...	.....	3	...	69	...	—	.....	24
Muram	...	...	...	16	...	108	...	...	.....	114
Earth	...	...	.....	14	...	...	...	...	.....	4
Sand	...	...	.....	4	...	...	...	...	.....	11
Lime stones	...	...	.....	11	...	...	...	...	.....	
Total, Southern Circle	...	1,01,023	.....	1,55,823	...	1,191	...	...	.....	2,58,037*
SIND CIRCLE. *Reserved Forests.*										
Vegetables, fruit and flowers.	...	370	.....	.....	...	...	...	...	.....	370
Rahuja garden	...	...	.....	400	...	...	...	...	.....	400
Babul and Kandi and lye seed	Mds 240	419	.....	.....	...	...	...	...	Mds 240	419
Sar-seed	...	...	.....	3,660	...	...	...	...	.....	3,660
Lopping of Baban and Babul and Kandi branches.	...	...	.....	44	...	...	...	...	.....	44
Sar & kant grass	...	...	.....	114	...	...	...	...	.....	114
Babul and Kandi pods	...	...	.....	23,820	...	...	...	...	.....	23,820
Value of seed recovered from Maldars, etc.	...	...	.....	1,985	...	...	...	...	.....	1,985
Grazing	...	...	.....	36,501	...	6,011	...	2,500	.....	45,012
Mango fruit	...	...	.....	213	...	...	...	...	.....	213
Date palm	...	...	.....	6	...	...	...	...	.....	6
Damage to coppice shoots	...	...	.....	61	...	...	...	...	.....	61
Lac	35	1,384	.....	17,075	...	...	...	...	.....	18,459
Jaw brushwood	...	...	.....	116	...	...	...	...	.....	116
Bamboos	...	50	.....	.....	...	...	...	...	.....	50
Ber fruit	...	...	.....	8	...	...	...	...	.....	8
Kamo creeper	...	...	.....	100	...	...	...	...	.....	100
Total, Sind Circle	...	2,223	.....	84,103	...	6,011	...	2,500	.....	94,837
GRAND TOTAL, PRESIDENCY...	...	1,55,995	.....	8,05,420	...	7,891	...	4,53,820	.....	14,23,126

* This is exclusive of Rs. 57,120 on account of Sandalwood shown under Government Agency and Rs. 15,000, Rs. 1,80,000 and Rs. 3,00,387 on account of Bamboos, Minor Forest Produce and Grazing shown under Privilege holders in the Statement in Chapter II, Section V (*b*) 'Outturn and Sources of Forest Produce.'

133214

FORM No. 21.—*Account of Timber and other Produce cut or collected by Government Agency and brought to Depôts, sold locally, or otherwise disposed of during the year 1919-1920.*

Name of Division.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
1	2	3	4	5	6
NORTHERN CIRCLE.	C. ft.	C. ft.	C. ft.	C. ft.	C. t.
Timber.					
Panch Mahals—					
Teak	...	313	313	313	...
Injaili	...	...	...	...	...
Total ...	...	313	313	313	...
Surat—					
Blackwood	85	96	181	118	63
Teak	5,506	12,090	17,596	7,930	9,666
Injaili	28,191	56,378	84,596	73,405	11,164
Total ...	33,782	68,564	1,02,346	81,453	20,893
North Thana—					
Teak	18,640	76,005	94,645	71,960	22,685
Injaili	6,213	25,335	31,548	23,986	7,562
Total ...	24,853	1,01,340	1,26,193	95,946	30,247
West Thana—					
Teak	...	7,263	7,263	5,696	1,567
Injaili	...	16,365	16,365	13,595	2,770
Total ...	...	23,628	23,628	19,291	4,337
East Thana—					
Teak	130	2,294	2,424	788	1,636
Injaili	276	6,882	7,158	2,428	4,730
Total ...	406	9,176	9,582	3,216	6,366
West Nasik—					
Teak	...	15,445	15,445	5,250	10,195
Injaili	...	...	...	...	...
Total ...	...	15,445	15,445	5,250	10,195
East Nasik—					
Sandal-wood	...	420	420	420	...
Total ..	...	420	420	420	...
Total Timber—					
Teak	4,276	1,13,410	1,37,686	91,937	45,749
Blackwood	85	96	181	118	63
Standal-wood	...	420	420	420	...
Injaili	34,680	1,04,960	1,39,640	1,13,414	26,226
Total ...	59,041	2,18,886	2,77,927	2,05,889	72,038
Fuel—					
Panch Mahals	...	200	200	200	...
Surat	...	10,700	10,700	10,700	...
North Thána	23,882	1,87,308	2,11,190	1,83,200	27,990
West Thána	...	67,720	67,720	62,510	5,210
East Thána	11,141	36,927	48,068	19,345	28,823
West Násik	58,401	800	95,201	30,614	28,587
North Násik	...	9,200	9,200	9,200	...
East Násik	...	...	...	...	...
Total, Fuel ...	93,424	3,12,855	4,06,279	3,15,669	90,610
Total, Timber ...	59,041	2,18,886	2,77,927	2,05,889	72,038
Total, Timber and Fuel ..	1,52,465	5,31,741	6,84,206	5,21,558	1,62,648
Surat—					
Bamboos	1,500	294	1,794	1,794	...
Mhowra flowers	2,873	4,215	7,088	3,088	4,000
Total ...	4,373	4,509	8,882	4,882	4,000
North Násik—					
Tarwad Seed	...	383	383	383	...
Total ...	4,373	4,892	9,265	5,265	4,000
Total, Northern Circle ...	C. ft. 1,52,465 + Rs. 4,373	C. ft. 5,31,741 + Rs. 4,892	C. ft. 6,84,206 + Rs. 9,265	C. ft. 5,21,558 + Rs. 5,265	C. ft. 1,62,648 + Rs. 4,000
CENTRAL CIRCLE.					
Timber (Cubic feet).					
East Khándesh	3,016	2,267	5,283	669	4,614
West Khándesh	...	809	809	185	624
North Khándesh	...	2,714	2,714	102	2,612
Kolaba	718	112	830	472	358
Poona	1,860	3,614	5,474	5,390	84
Sátara	...	477	477	6	471
Total ...	5,594	9,993	15,587	6,824	8,763

Name of Division.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
1	2	3	4	5	6
CENTRAL CIRCLE —*continued.*	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Fuel (cubic feet)					
East Khándesh	8,855	2,020	10,875	3,660	7,215
West Khándesh	.....	...	...	...	...
North Khándesh	29	...	29	29	...
Kolaba	16,508	38,481	54,989	45,261	9,788
Poona	1,115	1,72,928	1,74,043	1,74,043	...
Sátara	1,26,797	2,37,460	3,64,257	41,898	3,22,359
Total ...	1,53,304	4,50,889	6,04,193	2,64,841	3,39,312
Mhowra (weight).	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
West Khándesh	27,702	77,435	1,05,137	50,395	54,742
North Khándesh	25,785	81,787	1,07,572	32,865	74,707
Total ...	53,487	1,59,222	2,12,709	83,260	1,29,449
Sandalwood.	Rs.	Rs.	Rs.	Rs.	Rs.
Poona ...Value.	.....	325	325	325	...
Sátara ... ,,	.....	1,792	1,792	1,693	99
Total ...Value.	.....	2,117	2,117	2,018	99
Minor Forest Produce.					
Poona ...Value.	.....	6,697	6,697	6,697	...
Sátara ... ,,	.....	288	288	288	...
Total ...Value.	.....	6,985	6,985	6,985	...
Total, Central Circle ...	C. ft. 1,58,898 Lbs. 53,487 Rs.	C. ft. 4,60,882 Lbs. 1,59,222 Rs. 11,402	C. ft. 6,19,780 Lbs. 2,12,709 Rs. 11,402	C. ft. 2,71,705 Lbs. 83,260 Rs. 11,303	C. ft. 3,48,075 Lbs. 1,29,449 Rs. 99
SOUTHERN CIRCLE.					
Timber.					
Kánara, Northern Division—	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Teak	433,080	225,236	658,316	181,696	476,620
Blackwood	44,979	5,704	50,683	9,940	40,743
Junglewood	270,649	153,940	424,589	77,685	346,904
Total ...	748,708	384,880	1,133,588	269,321	864,267
Kánara, Eastern Division—					
Teak	226,152	240,626	466,778	190,072	176,706
Blackwood	402	7,505	7,907	202	7,705
Junglewood	44,674	63,337	108,101	55,489	52,522
Total ...	271,228	311,468	582,696	245,763	336,933
Kánara, Central Division—					
Teak	20,875	106,315	126,690	55,204	71,486
Blackwood ...	6,489	19,557	26,046	3,803	22,243
Junglewood	231,796	370,425	602,221	262,147	340,074
Total ...	258,660	496,297	754,957	321,154	433,803
Kánara, Southern Division—					
Teak	12,159	41,103	53,262	12,390	40,872
Blackwood	277	17	294	45	249
Junglewood	143,137	42,792	85,929	22,155	63,774
Total ...	55,573	83,912	139,485	34,590	104,895
Kánara, Western Division—					
Teak	16,011	39,421	55,432	24,280	31,152
Blackwood	590	503	1,093	1,093	...
Junglewood	64,756	127,852	192,608	171,528	21,080
Total ...	81,357	167,776	249,133	196,901	52,232

FORM No. 21.—*Account of Timber and other Produce cut or collected by Government Agency and brought to Depôts, sold locally, or otherwise disposed of during the year 1919-1920*—concluded.

Name of Division.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
1	2	3	4	5	6
SOUTHERN CIRCLE —*continued.*	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Belgaum Division—					
Teak	28,100	28,591	56,691	16,583	40,108
Blackwood	7,136	266	7,402	1,019	6,383
Junglewood	69,836	16,563	86,399	24,449	61,950
Total ...	105,072	45,420	150,494	42,051	108,441
Dhárwár—Bijápur Division—					
Junglewood	319	...	319	...	319
Total ...	319	...	319	...	319
Total, Timber—					
Teak	735,877	681,292	1,417,169	480,225	936,944
Blackwood	59,873	33,552	93,425	16,102	77,323
Junglewood	725,167	774,909	1,500,076	613,453	886,623
Total ...	1,520,917	1,489,753	3,010,670	1,109,780	1,900,890
Fuel.					
Kánara, Northern Division ...	270,832	161,932	432,764	109,745	323,019
Kánara, Eastern Division ...	...	48,500	48,500	1,850	46,650
Kánara, Central do. ...	241,700	109	241,809	24,272	537
Kánara, Southern do. ...	81,264	74,095	155,359	70,569	84,790
Kánara, Western do. ...	346,511	920,102	1,266,613	974,467	292,146
Belgaum do. ...	941,296	3,182,126	4,123,422	2,654,765	1,468,657
Dhárwár-Bijápur ...	...	7,290	7,290	7,265	25
Total ...	1,664,603	4,394,154	6,058,757	3,842,933	2,215,824
	Rs.	Rs.	Rs.	Rs.	Rs.
Bamboos.					
Kánara, Northern Division ...Value.	...	...	...	...	...
Kánara, Eastern Division ... ,,	...	150	150	150	...
Kánara Central Division ... ,,	1,705	7,715	9,420	9,420	...
Kánara Southern Division ... ,,	4,611	...	4,611	2,510 *2,101	...
Kánara, Western Division ... ,,	5	8,688	8,693	8,693	...
Belgaum Division ... ,,	...	2,338	2,338	2,338	...
Dhárwár-Bijápur Division ... ,,	...	...	...	...	...
Total ...Value.	6,321	18,819	25,212	25,212	...
Sandalwood.					
Kánara, Northern Division ...Value.	...	20	20	20	...
Kánara, Eastern Division ... ,,	...	16,645	16,645	16,645	...
Kánara, Central Division ... ,,	...	9,835	9,835	9,835	...
Kánara, Southern Division ... ,,	15	4,381	4,396	4,396	...
Belgaum Division ... ,,	2,350	11,547	13,897	13,847	†50
Dhárwár-Bijápur Division ... ,,	165	12,217	12,382	12,377	5
Total ...Value.	2,530	54,645	57,175	57,120	55
Minor Forest Produce.					
Kánara Northern Division ...Value.	1,522	535	‡2,057	2,057	...
Kánara, Eastern Division ... ,,	4,491	...	4,491	4,259 †232	...
Kánara Central Division ... ,,	...	...	...	...	...
Kánara Southern Division ... ,,	...	...	...	...	...
Kánara Western Division ... ,,	...	6,400	6,400	6,400	...
Belgaum Division ... ,,	...	65,196	65,196	65,196	...
Dhárwár-Bijápur Division ... ,,	50	...	50	‡50	...
Total ...Value.	6,063	72,131	78,194	78,194	...

Name of Division.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
	2	3	4	5	6
SOUTHERN CIRCLE —*continued.*	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Drift and waif wood and confiscated Forest Produce.					
Kánara, Northern Division ...Value.	.....	10,800	10,800	.....	10,800
Kánara, Eastern Division ... ,,	.....	.....	.....	.....	...
Kánara, Central Division ... ,,	99	.....	99	§52	47
Kánara, Southern Division ... ,,	.....	.....	.....	.....	...
Kánara, Western Division ... ,,	.....	24	24	24	...
Belgaum Division ... ,,	.....	114	114	114	...
Dhárwár-Bijápur Division ... ,,	2	22	24	24	...
Total ...Value.	101	10,960	11,061	214	10,847
Total, Southern Circle ...	C. ft. 3,185,520 Rs. 15,015	C. ft. 5,883,907 Rs. 56,627	C. ft. 9,069,427 Rs. 1,71,642	C. ft. 4,952,713 Rs. 1,60,740	C. ft. 4,116,714 Rs. 10,902
SIND CIRCLE.					
Timber.					
Sukkur	96	4,090	4,186	1,715	2,471
Shikarpur	423	975	1,398	1,383	15
Lárkána	.....	357	357	357	...
Hyderabad	20	11,716	11,736	11,736	...
Karáchi	117	1,460	1,577	192	1,385
Total ...	656	18,593	19,254	15,383	3,871
Fuel.					
Sukkur	.....	72,088	72,088	63,088	9,000
Shikarpur	608	10,568	11,178	10,768	408
Lárkána	.....	45,175	45,175	41,895	3,280
Hyderabad	89,071	504,984	594,055	489,211	104,844
Karáchi	244,555	984,139	1,228,694	745,862	482,832
Total ...	334,234	1,616,954	1,951,188	1,350,824	600,364
Minor Forest Produce.	Rs.	Rs.	Rs.	Rs.	Rs.
Sukkur ...Value.	478	1,696	2,174	1,798	376
Shikarpur ... ,,	428	782	1,210	780	430
Lárkána ... ,,	192	1,390	1,582	1,538	44
Hyderabad ... ,,	2,278	5,145	7,423	6,978	443
Karáchi ... ,,	540	5,445	5,985	5,944	41
Total ...Value.	3,916	14,458	18,374	17,038	1,336
Total, Sind Circle ...	C. ft. 334,830 Rs. 3,916	C. ft. 1,635,552 Rs. 14,458	C. ft. 1,970,442 Rs. 18,374	C. ft. 1,366,207 Rs. 17,038	C. ft. 604,235 Rs. 1,336
GRAND TOTAL, PRESIDENCY...	C. ft. 3,831,773 Lbs. 53,487 Rs. 23,304	C. ft. 8,512,082 Lbs. 1,59,222 Rs. 1,87,379	C. ft. 12,343,855 Lbs. 212,709 Rs. 2,10,683	C. ft. 7,112,183 Lbs. 83,260 Rs. 1,94,346	C. ft. 5,231,672 Lbs. 29,449 Rs. 16,337

*2,101 written off. †232 written off. ‡50 written off. §52 written off.

FORM No. 22.—*Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1919-1920.*

Description of Timber and other Forest Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in Value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
			Rs.			Rs.	Rs.	Rs.	
NORTHERN CIRCLE.									
Timber	...	59,041	87,836	...	72,038	77,759	...	10,077	
Fuel	...	93,424	18,426	...	90,610	26,613	8,187	...	
Bamboos	...	.....	1,500	...	.....	...	...	1,500	
Minor Forest Produce ...	...	.....	2,873	...	.....	4,000	1,127	...	
Total, Northern Circle ...	...	152,465	1,10,635	...	1,62,648	1,08,372	9,314	11,577	Net difference against the year—Rs. 2,263
CENTRAL CIRCLE.									
Timber	...	5,594	2,091	...	8,763	2,959	868	...	
Sandalwood	...	.....	...	...	.....	99	99	...	
Firewood	...	153,304	10,444	...	3,39,312	25,208	14,764	...	
Mhowra	...	Lbs. 58,467	2,617	...	Lbs. 1,29,449	8,361	5,744	...	
Total, Central Circle ...	...	.....	15,152	...	.....	36,627	21,475	...	Net difference in favour of the year—Rs. 21,475.

FORM No. 22.—*Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1919-1920*—concluded.

Description of Timber and other Forest Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in Value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
SOUTHERN CIRCLE.			Rs.			Rs.	Rs.	Rs.	
Timber.									
Teak	209,117	735,877	14,68,477	82,687	936,944	23,17,301	...	...	
Blackwood	11,571	59,873	89,576	5,053	77,323	1,46,007	...	...	
Junglewood	66,585	725,167	8,35,289	43,938	886,623	9,27,916	...	...	
Total, Timber ...	287,273	1,520,917	23,93,342	131,678	1,900,890	33,91,224	9,37,882	...	
Fuel	...	1,664,603	1,29,821	...	2,215,824	1,80,697	50,876	...	
Bamboos ... ... Value.	...	...	6,321	...	...	...	...	6,321	
Sandalwood ... ... Value.	...	...	2,530	...	...	55	...	2,475	
Minor Forest Produce ... Value.	...	...	6,063	...	...	...	...	6,063	
Confiscated Forest Produce „	...	...	101	...	...	10,847	10,746	...	
Total, Southern Circle ...	...	...	25,38,178	...	...	35,82,823	10,59,504	14,859	Net difference in favour of the year—Rs. 10,44,645.
SIND CIRCLE.									
Timber	1,735	656	94	2,649	3,871	2,851	2,757	...	
Fuel	...	334,234	17,943	...	600,364	35,162	17,219	...	
Minor Produce	...	...	3,916	...	...	1,336	...	2,580	
Total, Sind Circle ...	1,735	334,890	21,953	2,649	604,235	39,953	19,976	2,580	Net difference in favour of the year—Rs. 17,396.
GRAND TOTAL, PRESIDENCY ...	...	...	26,85,918	...	...	43,42,057	11,10,269	29,016	Net difference in favour of the year—Rs. 10,81,253.

FORM No. 23.—*Abstract showing the value of Live and Dead Stock for the year 1919-20.*

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8
CHIEF DIRECTION DIVISION.		Rs.		Rs.	Rs.	Rs.	
Tents (Servants' pals)	...	...	2	280	280	...	
Office furniture, etc.	...	...	...	370	370	...	
Remington Typewriter	...	...	1	547	547	...	
Hammond do.	...	...	1	310	310	...	
Roneo Duplicator	...	...	1	450	450	...	
Total ..	...	...	5	1,957	1,957	...	
UTILIZATION CIRCLE.							
Remington Typewriter No. 11 Brief.	...	...	1	516	516	...	
Office furniture, etc.	...	...	...	287	287	...	
Total, Utilization Circle ...	...	...	1	803	803	...	Net difference in favour of the year —Rs. 803.
BOMBAY FOREST COLLEGE.							
Dead Stock.							
Stores (Mathematical)	...	...	16	217	217	...	
Furniture	...	...	22	471	471	...	
Total, Bombay Forest College ...	...	...	38	688	688	...	
NORTHERN CIRCLE.							
Live Stock.							
Bullocks	3	250	3	213	...	37	Deterioration allowance 15 per cent.
Dead Stock.							
Buildings	321	3,93,447	328	3,93,882	435	...	Deterioration allowance 5 per cent.
Copying machines	8	...	8	...	...	...	
Cyclostyles	7	...	7	...	...	...	
Carts	7	126	7	120	...	6	
Hay presses	67	85,775	67	81,486	...	4,289	Deterioration allowance per cent.
Rosha plant	1	4,150	1	3,943	...	207	
Steel wire ropes	12	...	12	...	...	...	
Typewriters, Empire	1	190	...	...	...	190	Returned to Stationery office
Typewriters, Remington	7	...	9	...	...	...	Two Remingtons exchanged for 2 Hammonds.
Typewriter, Hammond	5	1,552	3	884	...	668	Deterioration 5 per cent. Two new purchased and 2 old ones sold.

FORM No. 23.—*Abstract showing the value of the Live and Dead Stock for the year 1919-20*—continued.

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8
NORTHERN CIRCLE—*continued.*		Rs.		Rs.	Rs.	Rs.	
Dead Stock—continued.							
Tents and Raoties	34	4,780	34	4,755	...	25	
Fowler train	1	30,000	1	28,500	...	1,500	Deterioration 5 per cent.
Saw sharpening machine	1	285	1	271	...	14	Do.
Clips	38	...	38	...	...	...	
Small spanners	6	...	6	...	...	...	
Large do.	2	...	2	...	...	...	
Big bolts	9	...	9	...	...	...	
Office furniture, etc.	...	38,572	...	38,833	261	...	Deterioration 5 per cent.
Seed rubbing cylindrical Machine ...	...	...	1	80	80	...	
Total, Dead Stock ...	527	5,58,877	534	5,52,754	776	6,899	
TOTAL, NORTHERN CIRCLE ...	530	5,59,127	537	5,52,967	776	6,936	
CENTRAL CIRCLE.							
Dead Stock.							
Buildings	162	1,90,356	172*	†2,00,057	9,701	...	*One building is received from the Police Department at a value of Rs. 1,000.
Tents	7	1,845	7	1,766	...	79	† The amount of Rs. 1,311 only is spent for acquiring land for building purposes Value not known.
Raoties (Cabul Pal and Fans) ...	27	1,961	28	1,882	...	79	
Tools, plant and office furniture ...	...	35,742	...	35,950	208	...	
Remington Typewriters	7	...	9	...	...	...	
Empire do.	4	...	2	...	...	...	
Copying machines	5	...	4	...	...	...	
Cyclostyles	4	...	5	...	...	...	
Yestograph duplicator	1	...	...	...	...	...	
Boat with fittings	1	1,285	1	1,219	...	66	
Boom with accessories	...	570	...	542	...	28	
Road-roller	...	...	1	500	500	...	
Total, Central Circle ...	218	2,31,759	229	2,41,916	10,469	252	
SOUTHERN CIRCLE.							
Live Stock.							
Buffaloes and Bullocks ...	63	2,992	49	2,002	...	990	
Total, Live Stock ...	63	2,992	49	2,002	...	990	
Dead Stock.							
Buildings	349	3,04,852	358	3,82,685	77,833	...	
Tents	9	2,034	9	1,932	...	102	
Raoties	24	1,418	26	1,743	325	...	
Tools, plant and office furniture ...	...	55,430	...	62,421	6,991	...	
Typewriters, Remington ...	1	...	2	...	...	...	
Do. Empire	2	...	3	...	...	...	
Do. Hammond ...	8	...	9	...	...	...	

FORM No. 23.—*Abstract showing the value of Live and Dead Stock for the year 1919-20*—continued.

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8
SOUTHERN CIRCLE —*continued.*		Rs.		Rs.	Rs.	Rs.	
Dead Stock—continued.							
Cyclostyles	(*a*)8	...	(*b*)7	...	...	...	(*a*) Included copying machines now shown separately. (*b*) Includes 1 cyclostyle obtained during the year.
Copying machines	...	...	2	...	...	...	
Ferro Prussiate Printing Frame ...	...	...	1	...	...	...	
Trolly wheel set	1	119	1	113	...	6	
Carts	42	2,280	47	2,527	247	...	
Guns	5	162	5	154	...	8	
Bicycles	5	500	7	822	322	...	
Iron safes	10	617	10	587	..	30	
Monorail materials	...	16,030	...	15,229	..	801	
Saw-mills (steam power) ...	6	1,12,337	(*c*)6	1,13,859	1,522	...	(*c*) With accessories obtained during the year.
Distillation plant	1	822	1	781	...	41	
Windlass	1	1,083	1	1,029	...	54	
Crab winch	1	44	1	42	...	2	
Total, Dead Stock ...	473	4,97,728	496	5,83,924	87,240	1,044	
Total, Southern Circle ...	536	5,00,720	545	5,85,926	87,240	2,034	Net difference in favour of the year—Rs. 85,206.
SIND CIRCLE.							
Live Stock.							
Bullocks	10	231	7	143	...	...	
Camels	33	1,277	20	665	...	...	
Total, Live Stock ...	43	1,508	27	808	...	700	
Dead Stock.							
Buildings	88	46,638	84	44,319	...	...	
Tents	14	2,768	15	2,875	...	...	
Stores, Mathematical ...	782	5,518	828	5,415	...	...	
Tools, plants and office furniture ...	3,101	15,939	3,113	16,862	...	...	
Remington Typewriters ...	8	...	8	...	...	...	
Copying machine	1	...	1	...	...	...	
Iron safes	1	191	1	182	...	...	
Bicycles	1	105	2	315	...	...	
Total ...	3,996	71,159	4,052	69,968	...	1,191	
Total, Sind Circle ...	4,039	72,667	4,079	70,776	...	1,891	
GRAND TOTAL, PRESIDENCY ...	...	13,64,273	...	14,55,033	1,01,873	11,113	Net difference in favour of the year—Rs. 90,760.

FORM No. 24.

FORM No. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	Panch Mahâls Division.	West Thâna Division.	North Thâna Division.	East Thâna Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
NORTHERN CIRCLE.					
REVENUE.					
I.—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	.....	309 8 0	5,467 5 0	29,600 14 0	5,283 12 0
b. Firewood and charcoal... ...	.....	.....	281 0 0	4,135 10 0	1,737 4 3
c. Bamboos	.....	.....	.....	.....	.....
d. Sandalwood ...	.....	.....	.....	.....	.....
e. Grass and other minor produce...	.....	.....	.....	.....	32,362 14 1
Total, I ...	.....	309 8 0	5,748 5 0	33,736 8 0	39,383 14 4
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
a. Timber	.....	3,21,719 5 7	3,43,217 15 0	8,55,729 6 6	2,72,509 4 11
b. Firewood and charcoal... ...	.....	547 2 0	723 0 9	537 5 7	68 13 0
c. Bamboos	.....	3,146 12 4	2,969 9 6	7,878 14 0	1,008 3 6
d. Grazing and fodder grass ...	.....	11,717 12 3	2,128 7 0	6,208 0 0	8,061 13 0
e. Other minor produce	.....	9,123 9 4	4,579 0 6	705 4 0	7,150 9 0
f. Other items ...	.....	.....	.....	.....	.....
g. Commutation fees	.....	.....	.....	.....	.....
Total, II ...	.....	3,46,254 9 6	3,53,623 0 9	8,71,058 14 1	2,88,798 11 5
III.—Drift and Waif Wood and Confiscated Forest Produce...	.....	1,135 9 0	83 6 3	0 13 0	10 1 9
Total, III ...	.....	1,135 9 0	83 6 3	0 13 0	10 1 9
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce...	.....	.....	.....	.....	.....
b. Revenue from shared and private Forests ...	.....	.....	4,291 10 0	1,483 6 8	.....
Total, IV ...	.....	.....	4,291 10 0	1,483 6 8	.....
V.—Miscellaneous—					
a. Fines and forfeitures	.....	397 14 10	1,293 9 0	25 0 0	2,999 9 11
b. Refunds	.....	145 2 1	1,084 9 9	159 8 8	110 13 4
c Other sources ...	579 0 0	8,887 2 0	3,877 7 5	3,318 9 7	10,411 4 10
Total, V ...	579 0 0	9,430 2 11	6,255 10 2	3,503 2 3	13,521 12 1
Grand Total, Revenue.	579 0 0	3,57,129 13 5	3,70,002 0 2	9,09,782 12 0	3,41,714 7 7
EXPENDITURE.					
A.—CONSERVANCY AND WORKS.					
I.—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	388 5 4	19 10 0	2,488 4 6	12,304 15 3	203 8 6
b. Firewood and charcoal... ...	.....	.....	107 4 0	86 4 0	2,943 9 9
c. Bamboos	.....	.....	.....	.....	.....
d. Sandalwood ..	.....	.....	.....	.....	.....
e. Grass and other minor produce...	.....	.....	.....	.....	63,654 0 3
Total, A-I ...	388 5 4	19 10 0	2,595 0 6	12,391 3 3	66,801 2 6
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers	19 4 0	3,716 5 4	4,706 1 6	6,013 13 2	7,824 12 11
Total, A-II ...	19 4 0	3,716 5 4	4,706 1 6	6,013 13 2	7,824 12 11
III.—Drift and Waif Wood and Confiscated Forest Produce ...	.....	.....	1 11 0	4 10 0	.....
Total, A-III ...	.....	.....	1 11 0	4 10 0	.....
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce...	.....	.....	.....	.....	.....
b. Revenue from shared and private Forests ...	.....	.....	.....	.....	.....
Total, A-IV ...	.....	.....	.....	.....	.....

different Divisions for the forest year 1919-1920.

Surat Division.	North Násik Division.	West Násik Division.	East Násik Division.	Direction Famine Fodder Division.	Direction Timber Operations Division.	Total for the forest year 1919-1920.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
70,362 4 0	.....	911 11 8	.....	.....	.....	1,11,935 6 8
867 10 0	715 0 0	2,357 11 0	.....	.....	.....	10,094 3 3
1,794 6 0	.....	.....	.....	.....	.....	1,794 6 0
.....	.....	.....	50 0 0	.....	.....	50 0 0
−1,319 11 9	.....	683 3 0	.. ...	1,07,879 2 2	.....	1,39,605 7 6
71,704 8 3	715 0 0	3,952 9 8	50 0 0	1,07,879 2 2	.....	2,63,479 7 5
2,30,672 2 1	8,155 13 0	1,17,087 0 0	1,545 4 0	.....	.....	21,50,636 3
3 0 0	2,883 1 0	7,806 3 6	3,668 2 0	.....	.....	16,241 11 10
6,363 13 6	100 2 0	4,316 4 0	32 0 9	.....	.....	25,815 11 7
3,624 14 0	17,591 3 0	26,146 4 0	21,033 14 0	.....	.....	96,512 3 3
2,126 1 10	9,791 2 6	3,169 4 6	13,444 3 0	.....	.....	50,089 2 8
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
2,42,789 15 5	38,521 5 6	1,58,525 0 0	39,723 7 9	.....	.....	23,39,295 0 5
31 0 0	102 10 3	.....	78 12 9	.....	.....	1,442 5 0
31 0 0	102 10 3	.....	78 12 9	.....	.....	1,442 5 0
.....	.....	.....	.....	.....	.....	.. ...
298 5 4	.....	.....	.....	.....	.....	6,073 6 0
298 5 4	.....	.....	.....	.....	.....	6,073 6 0
91 0 0	534 0 0	1,396 2 0	250 0 0	40 0 0	.....	7,027 3 9
4,162 1 8	.....	378 0 0	.....	133 13 3	.....	6,174 0 9
3,794 9 7	2,910 14 9	4,296 3 1	2,910 8 5	240 1 0	.....	41,225 12 8
8,047 11 3	3,444 14 9	6,070 5 1	3,160 8 5	413 14 3	.....	54,427 1 2
3,22,871 8 3	42,783 14 6	1,68,547 14 9	43,012 12 11	1,08,293 0 5	.....	26,64,717 4 0
36,590 3 5	.....	7,450 1 2	.....	.....	.....	59,445 0 2
1,708 12 4	261 0 0	103 8 0	.....	.....	.....	5,210 6 1
1,720 9 9	.....	.....	.....	.....	.....	1,720 9 9
.....	.....	.....	.....	.....	.....	.....
4,966 2 10	506 13 6	1,814 9 0	.....	13,004 14 10	.....	83,946 8 5
44,985 12 4	767 13 6	9,368 2 2	.....	13,004 14 10	.....	1,50,322 8 5
24,068 8 5	234 12 0	2,885 10 7	85 9 0	.....	.....	49,554 12 11
24,068 8 5	234 12 0	2,885 10 7	85 9 0	.....	.....	49,554 12 11
4 1 0	.....	5 8 0	1 11 0	.....	.....	17 9 0
4 1 0	.....	5 8 0	1 11 0	.....	.....	17 9 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....

FORM NO. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	Panch Mahâls Division.	West Thâna Division.	North Thâna Division.	East Thâna Division.
EXPENDITURE—*continued.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—*continued.*					
V.—Rent of leased Forests and Payments to Shareholders in Forests managed by Government ...	.....	.....	4,032 4 3	.....	.....
Total, A-V ...	.....	.....	4,032 4 3	.....	.....
VI.—Live-Stock, Stores, Tools and Plant—					
a. Purchase of cattle ...	.....	.....	.....	.....	.....
b. Feed and keep of cattle	.....	.....	.....	.....	.....
c. Purchase of stores, tools and plant ...	164 15 1	85 10 0	634 2 3	1,256 2 0	284 4 9
Total, A-VI ...	164 15 1	85 10 0	634 2 3	1,256 2 0	284 4 9
VII.—Communications and Buildings—					
a. Roads and bridges ...	.....	.....	3,810 13 0	7,189 4 1	2,167 0 7
b. Buildings	352 8 0	2,842 2 0	8,453 12 10	29,927 8 1	21,335 9 2
c. Other works	.....	656 6 0	184 10 0	787 10 9	1,210 5 0
Total, A-VII ...	352 8 0	3,498 8 0	12,449 3 10	37,904 6 11	24,712 14 9
VIII.—Organization, Improvement and Extension of Forests—					
a. Demarcation	.....	31 1 6	479 15 0	580 9 0	140 5 6
b. Cost of Forest Settlements and Compensation for land and rights	.....	.....	.....	24 2 5	128 4 3
c. Surveys	.....	.....	.....	.....	.....
d. Working-plans ...	.....	16 1 9	376 5 0	346 2 6	147 1 9
e. Sowing and planting...	150 0 0	865 15 10	3,186 10 7	12,201 13 8	1,960 8 6
f. Protection from fire...	.....	3,211 3 6	3,690 10 6	3,366 8 0	4,529 0 0
g. Other works	.....	72 8 0	15 0 0	45 7 6	12 11 0
Total, A-VIII ...	150 0 0	4,196 14 7	7,748 9 1	16,564 11 1	6,917 15 0
IX.—Miscellaneous—					
a. Law charges	.....	.....	.....	.....	.....
b. Grain Compensation .	.....	89 7 2	18 0 0	59 13 2	.....
c. Other charges ...	1,079 13 0	5,030 4 6	6,701 6 4	2,622 13 0	6,808 15 6
Total, A-IX ...	1,079 13 0	5,119 11 8	6,719 6 4	2,682 10 2	6,808 15 6
TOTAL, A.—CONSERVANCY AND WORKS	2,154 13 5	16,636 11 7	38,886 14 9	76,817 8 7	1,13,350 1 5
B.—ESTABLISHMENTS.					
I.—Salaries—					
a. Conservators	15,878 8 8	.....	.....	.....	2,215 8 1
b. Superior Officers ...	.....	6,638 6 2	12,688 0 0	17,452 9 3	17,922 10 6
c. Subordinate Forest and Depôt Establishments	.....	22,059 15 1	34,347 6 4	30,385 6 0	29,642 9 5
d. Office Establishments.	8,868 12 4	4,909 6 9	5,959 7 3	6,064 15 2	5,896 7 0
e. Deputation and Special Allowances...	1,743 7 10	10,937 6 6	15,621 14 8	12,938 13 4	15,230 7 3
f. Grain Compensation Allowance	.....	206 10 11	.....	1 11 10	1 6 5
Total, B-I ..	26,490 12 10	44,751 13 5	68,616 12 3	66,783 7 7	71,009 0 8
II.—Travelling Allowances—					
a. Conservators	1,838 13 1	.....	.....	.....	251 11 7
b. Superior Officers ...	−957 3 0	1,306 3 0	1,849 1 7	3,195 5 5	2,270 12 0
c. Subordinate Forest and Depôt Establishments	66 0 9	5,087 6 2	7,757 13 7	7,083 15 1	6,516 9 10
d. Office Establishments.	1,030 15 2	636 8 6	728 8 3	1,117 10 4	686 15 4
e. Forest School (Dehradun)	.....	.....	150 0 0	447 9 4	61 10 8
f. Plague allowance ...	.....	.....	.....	.....	.....
Total, B-II ...	1,978 10 0	7,030 1 8	10,485 7 5	11,844 8 2	9,787 11 5
III.—Contingencies—					
a. Stationery	26 8 6	243 0 10	487 4 10	338 7 2	348 9 8
b. Carriage of Tents and Records	141 9 0	259 10 6	380 3 6	805 13 0	312 1 0
c. Rents, rates and taxes	2,469 5 0	69 8 0	.....	129 13 0	51 8 0
d. Pay of Police Guards.	.....	.....	.....	.....	.....
e. Official postage ..	502 14 0	1,004 0 6	865 14 0	950 15 6	1,385 6 0
f. Sundries	1,484 7 9	483 9 6	461 1 7	1,070 5 3	913 1 7
Payments to Officers of other Provinces ...	.....	.....	.....	.....	.....
Total, B-III ...	4,624 12 3	2,059 13 4	2,194 7 11	3,295 5 11	3,010 10 3
TOTAL, B—ESTABLISHMENTS	33,094 3 1	53,841 12 5	81,296 11 7	81,923 5 8	83,807 6 4
GRAND TOTAL OF EXPENDITURE	35,249 0 6	70,478 8 0	1,20,183 10 4	1,58,740 14 3	1,97,157 7 9
SURPLUS OR DEFICIT ...	−34,670 0 0	+2,86,652 0 0	+2,49,818 0 0	+7,51,042 0 0	+1,44,557 0 0

different Divisions for the forest year 1919-1920—contd.

Surat Division.	North Násik Division.	West Násik Division.	East Násik Division.	Direction Famine Fodder Division.	Direction Timber Operations Division.	Total for the forest year 1919-1920.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
17,947 6 8	.....	.....	.....	.....	.....	21,979 10 11
17,947 6 8	.....	.....	.....	.....	.....	21,979 10 11
.....	.....	.....	.....	.....	.....	.....
185 8 0	.....	.....	.....	.....	.....	185 8 0
220 11 6	119 8 0	471 1 0	433 15 0	181 15 6	.....	3,852 5 1
406 3 6	119 8 0	471 0 0	433 15 0	181 15 6	.....	4,037 13 1
17,793 8 3	338 10 6	5,651 9 8	.....	.....	.....	36,950 14 6
11,562 8 9	30 0 0	24,034 2 0	57 3 0	.....	.....	98,595 5 10
719 3 0	.....	188 11 0	.....	.....	.....	3,746 13 9
30,075 4 5	368 10 6	29,874 6 8	57 3 0	.....	.....	1,39,293 2 1
83 [illegible] 3	231 2 0	587 1 11	60 12 0	.....	.....	2,194 9 2
.....	.....	52 2 9	.....	.....	.....	204 9 5
3 7 0	.....	.....	.....	.....	.....	3 7 0
.....	205 12 6	872 11 10	92 8 0	.....	.....	2,056 11 4
2,268 4 3	137 11 0	2,213 3 5	375 6 0	.....	.....	23,359 3
6,975 12 8	249 0 0	206 1 0	112 14 0	.....	.....	22,341 1 3
914 11 3	−2 0 0	.....	5 14 0	.....	.....	1,064 3 9
10,245 13 0	821 9 6	3,931 4 11	647 6 0	.....	.....	51,224 3 2
.....	.....	.....	.....	.....	.....	.....
148 4 1	.....	10 11 10	.....	17 5 9	.....	343 10 0
4,335 12 9	3,179 5 8	3,627 13 4	2,504 11 9	21 7 0	.....	35,912 6 10
4,484 0 10	3,179 5 8	3,638 9 2	2,504 11 9	38 12 9	.....	36,256 0 10
1,32,217 2 2	5,491 11 2	50,174 10 6	3,730 7 9	13,225 11 1	.....	4,52,685 12
.....	.....	.....	.....	.....	.....	18,094 9
22,783 11 9	6,149 5 4	14,306 2 1	5,500 0 0	.....	.....	1,03,445 13 1
25,091 7 7	14,886 8 5	16,687 15 5	11,859 6 8	.....	.....	1,84,960 10 1
6,093 0 8	4,004 8 9	4,110 4 3	3,841 7 2	252 3 2	.....	50,640 8
19,804 12 10	7,284 5 10	9,203 0 11	6,178 1 3	.....	.....	98,942 6
58 8 7	1 12 8	515 6 4	5 13 7	.....	.....	791 6 4
74,436 9 5	32,326 9 0	44,82 13 0	27,384 12 8	252 3 2	.....	4,56,874 14
.....	.....	.....	.....	.....	.....	2,090 8
4,899 1 10	1,200 0 0	2,089 3 7	1,020 0 0	994 9 0	.....	17,867 1
7,406 13 3	3,020 12 7	3,742 4 0	2,314 6 9	.....	.....	42,996 2 0
1,835 8 8	529 14 0	381 0 8	368 11 0	.....	.....	7,315 11 11
427 2 6	.....	.....	.....	.....	.....	1,086 6 6
.....	.....	.....	.....	.....	.....	.....
14,568 10 3	4,750 10 7	6,212 8 3	3,703 1 9	994 9 0	.....	71,355 14 6
292 7 9	193 3 3	218 2 8	160 4 7	15 0 0	.....	2,323 1 3
534 14 5	161 11 0	221 1 0	132 14 6	3 12 0	.....	,960 11
12 8 3	40 0 0	105 9 0	60 12 0	.....	.....	2,938 15
.....	.....	.....	.....	.....	.....	.....
800 12 0	275 9 6	350 14 0	340 1 0	.....	.....	6,476 6
1,181 5 3	270 14 0	355 14 9	340 9 0	.....	.....	6,561 4
.....	.....	.....	.....	.....	.....	.....
2,821 15 8	948 5 9	1,251 9 5	1,034 9 1	18 12 0	.....	21,260
91,827 3 4	38,025 9 4	52,286 14 8	32,122 7 6	1,265 8 2	.....	5,49,491 2 1
2,24,044 5 6	43,517 4 6	1,02,461 9 2	35,852 15 3	14,491 3 3	.....	10,02,176 14 6
+98,828 0 0	−733 0 0	+66,086 0 0	+7,160 0 0	+93,802 0 0	.....	+16,62,540 0 0

FORM No. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	East Khándesh Division.	West Khándesh Division.	North Khándesh Division.	Poona Division.
CENTRAL CIRCLE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
REVENUE.					
I.—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	.....	20 0 0	25 6 0	68 0 0	263 13 0
b. Firewood and charcoal	.....	.....	.....	6 0 0	10,539 2 0
c. Bamboos	.....	.....	.....	18 8 0	.....
d. Sandalwood	.....	.....	.....	.....	325 0 0
e. Grass and other minor produce ...	.....	.....	4,355 13 9	2,916 6 9	6,697 8 0
Total, I ...	.....	20 0 0	4,380 13 9	3,008 14 9	17,825 7 0
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
a. Timber	.....	12,635 8 0	1,21,429 6 9	47,753 5 0	32,148 6 0
b. Firewood and charcoal	.....	14,568 15 6	3,872 8 0	10,008 1 0	31,369 5 6
c. Bamboos	.....	10,127 15 0	442 0 0	1,589 4 0	184 14 0
d. Grazing and fodder-grass	.....	1,51,119 13 2	41,551 13 0	46,874 8 0	52,502 12 0
e. Other minor produce	.....	2,769 6 0	10,795 13 0	8,200 3 0	9,208 4 0
f. Other items	.....	.....	.....	.....	.....
g. Commutation fees .	.....	.....	.....	.....	.....
Total, II ...	.....	1,90,621 9 8	1,78,091 8 9	1,14,425 5 0	1,25,503 9 6
III.—Drift and Waif Wood and Confiscated Forest Produce ...	.....	261 1 3	165 12 0	152 12 6	330 0 6
Total, III ...	.....	261 1 3	165 12 0	152 12 6	330 0 6
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce ...	.....	4,314 12 9	.....	2,701 11 0	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	44 11 2
Total, IV ...	.....	4,314 12 9	.....	2,701 11 0	44 11 2
V.—Miscellaneous—					
a. Fines and forfeitures	.....	2,386 5 0	577 4 0	2,823 5 0	567 14 0
b. Refunds	7 14 8	17 6 0	109 0 11	56 13 5	7 15 0
c. Other sources ...	725 4 0	8,129 8 11	7,354 0 4	12,499 2 4	8,449 2 0
Total, V ...	733 2 8	10,533 3 11	8,040 5 3	15,379 4 9	9,024 15 0
Grand Total, Revenue ...	733 2 8	2,05,750 11 7	1,90,678 7 9	1,35,668 0 0	1,52,728 11 2
EXPENDITURE.					
A.—CONSERVANCY AND WORKS.					
I—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	.....	346 8 0	33 10 0	19 6 0	133 9 0
b. Firewood and charcoal	.....	12 8 0	.....	.....	1,287 3 0
c. Bamboos	.....	.....	.....	18 8 0	.....
d. Sandalwood	.....	.....	.....	.....	141 9 6
e. Grass and other minor produce ...	.....	.....	2,114 5 0	4,567 10 11	1,451 15 9
Total, A-I ...	.....	359 0 0	2,147 15 0	4,605 8 11	3,014 5 3
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers.	.....	4,223 13 3	4,179 9 5	6,614 15 11	755 4 0
Total, A-II ...	.....	4,223 13 3	4,179 9 5	6,614 15 11	755 4 0
III.—Drift and Waif Wood and Confiscated Forest Produce ...	.....	10 4 0	.....	23 13 6	10 8 0
Total, A-III ...	.....	10 4 0	.....	23 13 6	10 8 0
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce ...	.....	.....	.....	.....	.....
b. Revenue from shared and private Forests	.....	.....	.....	.....	.....
Total, A-IV ...	.....	.....	.....	.....	.....

different Divisions for forest year 1919-1920—contd.

Sátára Division.	Kolába Division.	Working Plans, Division.	West Khándesh Famine Fodder Division.	Poona Famine Fodder Division.	Satára Famine Fodder Division.	West Khándesh Army Fodder Division.	Total for the forest year 1919-20.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
6 0 0	34 0 0	.....	.....	.....	.....	.....	416 13 0
12,002 11 4	7,034 6 0	.....	.....	.....	.....	.....	29,582 3 4
.....	.....	.....	.....	.....	.....	.....	18 8 0
2,082 0 4	.....	.....	.....	.....	.....	.....	2,407 0 4
287 10 0	.....	.....	61 0 0	4,687 0 0	.....	.....	19,605 6 6
14,378 5 8	7,068 6 0	.....	61 0 0	4,687 0 0	.....	.....	51,429 15 2
4,458 9 0	2,03,843 3 6	.....	.....	.....	.....	.....	4,21,668 6 8
526 14 3	1,230 0 6	.....	.....	.....	.....	.....	61,575 12 9
70 14 0	.....	.....	.....	.....	.....	.....	12,414 15 0
25,524 15 6	11,496 9 0	.....	.....	.....	.....	.....	3,29,070 6 8
15,243 7 3	5,305 0 0	.....	.....	.....	.....	.....	51,612 1 3
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
45,824 12 0	2,21,874 13 0	.....	.....	.....	.....	.....	8,76,341 9 11
67 14 2	790 12 6	.....	.....	.....	.....	.....	1,768 4 11
67 14 2	790 12 6	.....	.....	.....	.....	.....	1,768 4 11
.....	.....	.....	.....	.....	.....	.....	7,016 7 9
.....	3 12	.....	.....	.....	.....	.....	48 7 2
.....	3 12 0	.....	.....	.....	.....	.....	7,064 14 11
564 0 0	5,052 13 0	.....	.....	.....	.....	.....	11,971 9 0
0 12 0	3 11 2	28 15 8	.....	.....	.....	.....	232 8 10
4,509 9 10	9,523 8 4	7 1 7	.....	.....	.....	.....	51,197 5 4
5,074 5 10	14,580 0 6	36 1 3	.....	.....	.....	.....	63,401 7 2
65,345 5 8	2,44,317 12 0	36 1 3	61 0 0	4,687 0 0	.....	.....	10,00,006 4 1
50 0 0	.....	.....	.....	.....	.....	.....	583 1 0
4,717 15 3	3,958 8 9	.....	.....	.....	.....	.....	9,976 3 0
.....	.....	.....	.....	.....	.....	.....	18 8 0
187 9 0	.....	.....	.....	.....	.....	.....	329 2 6
139 11 0	.....	.....	1,09,466 2 8	215 7 4	38 1 0	3,806 14 9	1,21,800 4 5
5,095 3 3	3,958 8 9	.....	1,09,466 2 8	215 7 4	38 1 0	3,806 14 9	1,32,707 2 11
205 5 9	4,324 11 8	.....	.....	.....	.....	.....	20,303 12 0
205 5 9	4,324 11 8	.....	.....	.....	.....	.....	20,303 12 0
.....	8 9 0	.....	.....	.....	.....	.....	53 2 6
.....	8 9 0	.....	.....	.....	.....	.....	53 2 6
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....

FORM No. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	East Khándesh Division.	West Khándesh Division.	North Khándesh Division.	Poona Division.
EXPENDITURE—*continued.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—*continued.*					
V.—Rent of leased Forests and Payments to Share-holders in Forests managed by Government	.....	.....	.....	.....	34 10 11
Total, A-V ...	...	.....	.....	.....	34 10 11
VI.—Live-stock, Stores, Tools and Plant—					
a. Purchase of cattle	.....	.....	.....	.....	.....
b. Feed and keep of cattle	.....	.....	.....	.....	.....
c. Purchase of stores, tools and plant...	6 0 0	327 12 6	321 12 0	533 3 0	131 13 7
Total, A-VI ...	6 0 0	327 12 6	321 12 0	533 3 0	131 13 7
VII.—Communications and Buildings—					
a. Roads and Bridges	.....	1,765 12 9	2,794 0 6	6,005 12 9	3,876 5 7
b. Buildings... ...	.....	5,129 1 5	780 5 6	8,710 12 10	5,004 15 9
c. Other works ...	.....	220 14 3	482 11 7	1,157 9 6	.....
Total, A-VII ...	.....	7,115 12 5	4,057 1 7	15,874 3 1	8,881 5 4
VIII.—Organization, Improvement and Extension of Forest—					
a. Demarcation ...	.....	76 14 0	146 10 0	176 2 0	427 12 0
b. Cost of Forest Settlements and Compensation for land and rights ...	.....	.....	.....	17 4 0	.....
c. Surveys	.....	.....	.....	.....	.....
d. Working Plans ...	.....	883 14 7	501 13 0	901 4 3	534 13 6
e. Sowing and Planting	.....	352 12 0	1,260 13 9	82 9 0	2,997 2 0
f. Protection from Fire	.....	2,041 10 0	5,039 4 9	7,483 14 8	90 8 0
g. Other work ...	.....	81 8 6	102 4 0	216 3 6	223 3 1
Total, A-VIII ...	.....	3,436 11 1	7,050 13 6	8,883 5 5	4,273 6 7
IX.—Miscellaneous—					
a. Law charges ...	.....	.....	.....	.....	50 0 0
b. Grain Compensation	.....	13 1 0	.....	33 5 7	6 0 0
c. Other charges ...	20,268 14 6	349 14 1	739 9 6	626 13 10	747 15 6
Total, A-IX ...	20,268 14 6	362 15 1	739 9 6	660 3 5	803 15 6
TOTAL A.—CONSERVANCY AND WORKS...	20,274 14 6	15,836 4 4	18,426 13 0	37,195 5 3	17,905 5 2
B.—ESTABLISHMENTS.					
I.—Salaries—					
a. Conservators ...	40,209 5 3	.....	.....	.....	.....
b. Superior Officers .	.....	15,219 15 11	5,745 2 7	19,312 14 6	16,116 4 6
c. Subordinate Forest and Depôt Establishments .	.....	29,231 6 6	21,813 5 9	22,093 6 2	40,350 2 9
d. Office Establishments	8,118 3 7	7,047 12 8	5,103 0 1	5,222 3 6	6,508 0 2
e. Deputation and Special Allowances	23,312 1 6	14,427 7 0	12,531 3 0	12,278 6 3	18,421 14 7
f. Grain Compensation Allowance.	.....	0 4 8	.....	.....	13 8 0
Total, B-I ...	71,719 10 4	65,926 14 9	45,192 11 5	58,906 14 5	81,409 14 0
II.—Travelling Allowances—					
a. Conservators ...	2,789 4 1	.....	.....	.....	.....
b. Superior Officers .	.....	2,670 15 0	2,994 4 4	2,135 0 0	2,000 8 11
c. Subordinate Forest and Depôt Establishments.	90 0 0	5,900 5 4	5,959 12 9	6,594 5 1	7,846 1 0
d. Office Establishments	954 8 7	958 5 8	913 12 6	1,114 8 2	1,000 0 8
e. Forest School, (Dehra Dun) ...	1,260 0 5	275 0 0	400 0 0	375 0 0	.....
f. Plague allowance.	.....	15 0 0	80 0 0	110 0 0	.....
Total, B-II ...	5,093 13 1	9,909 10 0	9,647 13 7	10,628 13 3	10,846 10 7
III.—Contingencies—					
a. Stationery ...	6 15 0	322 4 3	210 0 10	269 3 6	406 2 10
b. Carriage of Tents and Records ...	301 7 0	323 12 10	251 5 0	424 14 0	314 1 6
c. Rents, rates and taxes	.....	78 0 0	24 3 8	98 12 0	163 0 0
d. Pay of Police guards	.....	.....	.....	.....	.....
e. Official postage...	650 3 6	1,130 1 6	965 2 6	782 15 0	1,228 1 0
f. Sundries	458 9 9	413 9 0	600 9 11	506 1 2	570 4 3
Payments to Officers of other Provinces.	.....	.....	.....	.....	.....
Total, B-III ...	1,417 3 3	2,267 11 7	2,051 5 11	2,081 13 8	2,681 9 7
TOTAL, B. ESTABLISHMENTS	78,230 10 8	78,104 4 4	56,891 14 11	71,617 9 4	94,938 2 2
GRAND TOTAL OF EXPENDITURE ...	98,505 9 2	93,940 8 8	75,388 11 11	1,08,812 14 7	1,12,843 7 4
Surplus or Deficit ...	−97,773 0 0	+1,11,810 0 0	+1,15,289 0 0	+26,865 0 0	+39,886 0 0

different Divisions for the forest year 1919-1920—continued.

Sátára Division.	Kolaba Division.	Working Plans Division.	West Khándesh Famine Fodder Division.	Poona Famine Fodder Division.	Sátara Famine Fodder Division.	West Khandesh Army Fodder Division.	Total for the forest year 1919-1920.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
3,652 12 5	16,242 9 7	.....	.....	.....	.....	.....	19,930 0 11
3,652 12 5	16,242 9 7	.....	.....	.....	.....	.....	19,930 0 11
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
497 6 0	51 0 0	49 1 1	.....	.....	.....	.....	1,918 0 2
497 6 0	51 0 0	49 1 1	.....	.....	.....	.....	1,918 0 2
3,055 3 9	174 15 3	9 6 0	.....	.....	.....	.....	18,281 8 7
3,093 8 6	561 12 0	.....	.....	.....	.....	.....	23,286 8 0
0 8 0	.....	.....	.....	.....	.....	.....	1,861 11 4
6,755 4 3	736 11 3	9 6 0	.....	.....	.....	.....	43,429 11 11
537 3 6	274 7 0	.....	.....	.....	.....	.....	1,639 0 6
41 0 0	.....	.....	.....	.....	.....	.....	58 4 0
.....	.....	.....	.....	.....	.....	.....	.....
128 13 0	449 0 9	754 9 11	.....	.....	.....	.....	4,157 5 0
1,477 14 7	2,346 0 3	*-19 8 0*	.....	.....	.....	.....	8,497 11 7
168 0 0	150 0 0	.....	.....	.....	.....	.....	14,976 5 5
151 4 0	836 8 6	.....	.....	.....	.....	.....	1,610 15 7
2,504 3 1	4,056 0 6	755 1 11	.....	.....	.....	.....	30,939 10 1
.....	.....	.....	.....	.....	.....	.....	50 0 0
1 8 0	.....	.....	.....	.....	.....	.....	53 14 7
704 7 2	797 0 0	33 9 7	.....	.....	.....	.....	24,268 4 2
705 15 2	797 0 0	33 9 7	.....	.....	.....	.....	24,372 2 9
19,416 1 11	30,175 2 9	827 2 7	1,09,466 2 8	215 7 4	38 1 0	3,806 14 9	2,73,653 11 3
.....	.....	.....	.....	.....	.....	.....	40,289 5 3
11,288 6 2	11,970 0 0	.....	.....	.....	.....	.....	79,652 11 8
25,873 7 9	41,581 15 2	1,761 8 1	.....	.....	.....	.....	1,82,705 4 2
6,064 3 2	8,458 3 3	1,410 9 8	.....	.....	.....	.....	47,932 4 1
13,062 0 3	20,601 12 8	1,170 10 10	.....	.....	.....	.....	1,15,805 8 1
6 0 0	.....	.....	.....	.....	.....	.....	19 12 8
56,294 1 4	82,611 15 1	4,342 12 7	.....	.....	.....	.....	4,66,404 13 11
.....	.....	.....	.....	.....	.....	.....	2,789 4 1
2,053 2 7	1,620 0 0	.....	.....	.....	.....	.....	13,073 14 10
6,299 11 5	6,737 12 5	1,289 0 2	.....	.....	.....	.....	40,807 0 2
875 9 2	817 9 2	470 10 8	.....	.....	.....	.....	7,105 0 7
.....	.....	.....	.....	.....	.....	.....	2,310 0 5
.....	15 0 0	.....	.....	.....	.....	.....	220 0 0
2,223 7 2	2,190 5 7	1,759 10 10	.....	.....	.....	.....	66,305 4 1
270 8 10	372 1 9	2 7 0	.....	.....	.....	.....	1,859 12 0
312 15 6	225 11 10	147 9 0	.....	.....	.....	.....	2,331 12 8
360 11 0	.....	.....	.....	.....	.....	.....	724 10 8
.....	.....	.....	.....	.....	.....	.....	.....
905 8 6	1,035 12 0	70 7 0	.....	.....	.....	.....	6,768 3 0
301 6 9	239 6 3	138 8 6	.....	.....	.....	.....	3,228 7 7
.....	.....	.....	.....	.....	.....	.....	.....
2,181 2 7	1,872 15 10	358 15 6	.....	.....	.....	.....	14,912 13 11
67,703 11 1	93,675 4 6	6,461 6 11	.....	.....	.....	.....	5,47,622 15 11
87,119 13 0	1,23,850 7 3	7,288 9 6	1,09,466 2 8	215 7 4	38 1 0	3,806 14 9	8,21,276 11 2
−21,775 0 0	+1,20,468 0 0	−7,253 0 0	−1,03,405 0 0	+4,471 0 0	−38 0 0	−3,807 0 0	+1,78,729 0 0

FORM No. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	Belgaum Division.	Belgaum Famine Fodder Division.	Kánara Eastern Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
SOUTHERN CIRCLE.				
REVENUE.				
I.—Timber and other Produce removed from the Forests by Government Agency—				
a. Timber	.....	33,742 7 9	.....	4,78,161 11 8
b. Firewood and charcoal	.....	2,08,670 2 10	.....	118 0 6
c. Bamboos	.....	2,337 10 5	.....	150 0 0
d. Sandalwood	.....	13,847 3 4	.....	16,644 12 1
e. Grass and other minor produce	.....	153 0 0	65,043 1 3	4,258 14 10
Total, I	.....	2 58,750 8 4	65,043 1 3	4,99,333 6 7
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—				
a. Timber	.....	56,032 14 3	.....	56,215 3 5
b. Firewood and charcoal	.....	55,677 6 10	.....	17,240 10 0
c. Bamboos	.....	13,093 10 0	.....	11,409 9 0
d. Grazing and fodder grass	.....	12,343 14 1	.....	5,748 3 5
e. Other minor produce	.....	19,999 9 0	.....	1,744 2 0
f. Other items	.....	.....	.....	.....
g. Commutation fees	.....	.....	.....	.....
Total, II	.....	1,56,547 6 2	.....	92,357 11 10
III.—Drift and Waif Wood and Confiscated Forest Produce	.....	113 15 6	.....	.....
Total, III	.....	113 15 6	.....	.....
IV.—Revenue from Forests not managed by Government—				
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....
b. Revenue from shared and private Forests	.....	.....	.....	.....
Total, IV	.....	.....	.....	.....
V.—Miscellaneous—				
a. Fines and forfeitures	.....	4,431 9 6	.....	2,150 0 6
b. Refunds	.....	557 4 9	.....	11 9 0
c. Other sources	1,925 0 8	21,318 7 2	.....	16,134 0 5
Total, V	1,925 0 8	26,307 5 5	.....	18,295 9 11
Grand Total, Revenue	1,925 0 8	4,41,719 3 5	65,043 1 3	6,09,986 12 4
EXPENDITURE.				
A.—CONSERVANCY AND WORKS.				
I.—Timber and other Produce removed from the Forests by Government Agency—				
a. Timber	.....	22,180 7 10	.....	2,12,590 10 6
b. Firewood and charcoal	.....	1,95,379 11 10	.....	695 10 0
c. Bamboos	.....	269 11 0	.....	1 12 0
d. Sandalwood	.....	2,850 4 1	.....	904 6 11
e. Grass and other minor produce	.....	216 0 0	20,473 6 6	570 7 0
Total, A-I	.....	2,20,896 2 9	20,473 6 6	2,14,762 14 5
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers	.....	1,049 11 5	.....	1,716 9 9
Total, A-II	.....	1,049 11 5	.....	1,716 9 9
III.—Drift and Waif Wood and Confiscated Forest Produce	.....	25 13 0	.....	4 0 0
Total, A-III	.....	25 13 0	.....	4 0 0
IV.—Revenue from Forests not managed by Government—				
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....
b. Revenue from shared and private Forests	.....	.....	.....	.....
Total, A-IV	.....	.....	.....	.....

different Divisions for the forest year 1919-1920—contd.

Kánara Northern Division.	Kánara Northern Famine Fodder Division.	Kánara Southern Division.	Kánara Western Division.	Kánara Central Division.	Dhárwár, Bijápur Division.	Total for the forest year 1919-1920.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
6,37,976 5 10	.....	35,942 1 7	2,13,364 15 1	1,63,102 5 10	.....	15,62,289 15 9
13,118 5 1	.....	3,170 14 3	1,14,484 14 5	4,202 1 4	666 13 0	3,44,431 2 11
.....	.....	2,510 8 10	8,692 15 1	9,449 8 6	.....	23,110 10 10
20 0 0	.....	4,396 7 3	.....	9,834 14 5	12,376 9 10	57,119 14 11
—549 12 0	2,606 10 0	.....	6,400 1 3	.....	.....	77,911 15 4
6,50,564 14 11	2,606 10 0	46,019 15 11	3,42,942 13 10	1,86,558 14 1	13,043 6 10	26,64,863 11 9
2,90,167 5 3	.....	3,214 10 4	5,054 4 10	1,886 7 0	334 14 6	4,21,905 11 7
39,119 14 0	.....	7,038 6 7	10,591 13 1	7,943 0 9	16,432 0 0	1,53,443 3 3
11,818 4 0	.....	487 1 10	5,848 13 11	424 2 0	515 7 4	43,657 0 1
4,905 8 0	.....	10,029 3 0	5,846 6 0	7,744 2 9	10,841 10 0	57,459 4 3
4,107 2 0	.....	7,409 4 6	2,361 7 8	2,807 15 0	16,477 7 5	54,706 15 7
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
3,59,178 1 3	.....	28,178 15 3	29,702 13 6	20,605 11 6	44,601 7 3	7,31,172 2 9
.....	.....	.....	23 15 6	0 1 0	24 2 0	162 2 0
.....	.....	.....	23 15 6	0 1 0	24 2 0	162 2 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
209 6 0	.....	838 5 6	1,746 11 1	1,098 6 5	216 0 0	10,690 7 0
20,516 15 3	.....	69 0 0	227 7 4	134 12 6	78 13 1	21,505 13 11
5,023 3 8	.....	2,562 5 4	1,812 2 5	2,147 8 4	5,156 12 3	56,079 8 3
25,749 8 11	.....	3,469 10 10	3,786 4 10	3,380 11 3	5,451 9 4	88,365 13 2
10,35,492 9 1	2,606 10 0	77,668 10 0	3,76,455 15 8	2,10,545 5 10	63,119 15 5	28,84,563 13 8
1,52,088 13 6	.....	32,519 6 5	1,28,018 0 4	1,06,356 9 9	1 4 0	6,53,755 4 4
1,888 15 3	.....	2,657 2 2	49,765 11 4	814 14 7	104 6 5	2,51,316 7 7
.....	.....	35 0 0	108 0 0	339 15 0	.....	754 6 0
83 12 0	.....	284 0 3	.....	753 7 2	976 3 10	5,852 2 3
—764 3 2	2,370 3 7	.....	29 2 0	.....	.....	22,894 15 11
1,53,307 5 7	2,370 3 7	35,495 8 10	1,77,920 13 8	1,08,264 14 6	1,081 14 3	9,34,573 4 1
451 8 3	.....	226 7 7	1,803 7 0	334 15 2	602 5 0	6,185 0 2
451 8 3	.....	226 7 7	1,803 7 0	334 15 2	602 5 0	6,185 0 2
9 5 0	.....	7 14 0	11 15 0	15 14 6	12 10 0	87 7 6
9 5 0	.....	7 14 0	11 15 0	15 14 6	12 10 0	87 7 6
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....

FORM NO. 24.—*Summary of Revenue and Expenditure of the*

Budget Head.	Direction.	Belgaum Division.	Belgaum Famine Fodder Division.	Kánara Eastern Division.
EXPENDITURE—*contd.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—*contd.*				
V.—Rent of leased Forests and Payments to Share-holders in Forests managed by Government	.....	.....	.....	.....
Total, A-V ...	.....	.....	.....	.....
VI.—Live-stock Stores, Tools and Plant—				
a. Purchase of cattle	.....	.....	.....	72 0 0
b. Feed and keep of cattle ...	.....	.....	.....	1,750 10 10
c. Purchase of stores, tools and plant ...	29,808 1 3	3 0 0	.....	107 5 6
Total, A-VI ...	29,808 1 3	3 0 0	.....	1,930 0 4
VII.—Communications and Buildings—				
a. Roads and bridges	.....	25,633 12 1	.....	77,677 1 10
b. Buildings	.....	4,250 3 7	.....	12,353 7 10
c. Other works	.....	1,514 7 3	.....	3,065 14 1
Total, A-VII ...	.....	31,398 6 11	.....	93,096 7 9
VIII.—Organization, Improvement and Extension of Forest—				
a. Demarcation	.....	248 5 0	.....	1,621 10 0
b. Cost of Forest Settlements and Compensation for land and rights	.....	.....	.....	.....
c. Surveys	.....	.....	.....	.....
d. Working-plans	.....	.....	.....	.....
e. Sowing and planting	.....	11,240 15 4	.....	28,854 11 9
f. Protection from fire	.....	5,110 7 9	.....	6,493 11 6
g. Other works	.....	725 0 3	.....	5,222 6 0
Total, A-VIII ...	.....	17,333 12 4	.....	42,192 7 3
IX.—Miscellaneous—				
a. Law charges	.....	.....	.....	.....
b. Grain compensation allowance ...	.....	37 0 5	.....	1,619 1 0
c. Other charges	174 4 0	6,400 5 4	.....	9,872 3 6
Total, A-IX ...	174 4 0	6,437 5 9	.....	11,491 4 6
TOTAL A.—CONSERVANCY AND WORKS ...	29,982 5 3	2,77,144 4 2	20,473 6 6	3,65,193 12 0
B.—ESTABLISHMENTS.				
I.—Salaries—				
a. Conservators	26,025 6 10	.....	.....	.....
b. Superior Officers	.....	25,311 14 11	.....	14,080 1 9
c. Subordinate Forest and Depôt Establishments	958 1 0	31,655 7 2	.....	26,952 3 1
d. Office Establishments	6,305 2 5	6,236 10 1	.....	5,957 12 4
e. Deputation and Special Allowances ...	2,007 8 7	15,967 1 10	.....	18,305 1 6
f. Grain Compensation Allowance—	.....	.....	.....	8 12 11
Total, B-I ...	35,296 2 10	79,171 2 0	.....	65,303 15 7
II.—Travelling Allowances—				
a. Conservators	3,068 10 10	.....	.....	.....
b. Superior Officers	.....	3,888 10 7	.....	1,659 8 0
c. Subordinate Forest and Depôt Establishments	66 15 8	7,528 2 10	.....	6,462 13 4
d. Office Establishments	891 0 9	1,163 12 2	.....	787 5 8
e. Forest School (Dehra Dun)	.....	.....	.....	225 0 0
f. Plague allowance	.....	.....	.....	.....
Total, B-II ...	4,026 11 3	12,886 9 7	.....	9,134 11 0
III.—Contingencies—				
a. Stationery	33 9 0	333 7 2	.....	261 12 7
b. Carriage of Tents and Records... ...	429 9 7	332 1 3	.....	116 1 6
c. Rents, Rates and Taxes	840 0 0	18 0 0	.....	.....
d. Pay of Police-guards	.....	.....	.....	.....
e. Official Postage	928 5 6	1,448 3 6	.....	1,014 0 0
f. Sundries	2,529 4 6	1,102 15 9	.....	116 12 0
Payments to Officers of other Provinces ...	.....	.....	.....	.....
Total, B-III ...	4,765 12 7	3,234 11 8	.....	1,508 10 1
TOTAL, B—ESTABLISHMENTS ...	44,088 10 8	95,292 7 3	.....	75,947 4 8
GRAND TOTAL OF EXPENDITURE ...	74,070 15 11	3,72,436 11 5	20,473 6 6	4,41,141 0 8
SURPLUS OR DEFICIT ...	—72,44 0	+69,282 0 0	+44,570 0 0	+1,68,846 0 0

different Divisions for the forest year 1919-1920—contd.

Kánara Northern Division.	Kánara Northern Famine fodder Division.	Kánara Southern Division.	Kánara Western Division.	Kánara Central Division.	Dhárwár and Bijápur Division.	Total for the forest year 1919-1920.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
120 0 0	.....	.....	.....	.....	.....	192 0 0
1,454 2 8	.....	.....	645 10 6	.....	.....	3,850 7 10
7,930 12 6	.....	832 6 3	472 5 0	801 3 9	5 8 0	39,960 10 3
9,504 15 0	.....	832 6 3	1,117 15 6	801 3 9	5 8 0	44,003 2 1
1,89,883 8 5	.....	11,469 0 5	59,442 2 3	14,150 15 10	.....	3,78,616 8 10
68,046 9 5	.....	4,076 12 6	3,932 2 3	2,887 15 3	221 2 8	95,768 5 9
5,859 3 5	.....	61 10 0	278 1 0	2 0 0	80 10 10	10,861 14 7
2,63,789 5 6	.....	15,607 6 11	63,652 5 6	17,400 15 1	301 13 6	4,85,246 13 2
1 8 0	.....	111 4 0	826 13 6	56 10 6	331 7 6	3,197 10 6
2,370 3 3	.....	168 4 0	116 5 3	.....	200 0 0	2,754 12 6
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
26,538 9 1	.....	3,756 9 9	10,816 11 5	2,656 1 3	1,473 13 10	35,346 6 5
5,134 5 11	.....	472 1 4	3,378 8 0	1,070 6 1	998 5 9	22,657 14 4
.....	.....	220 8 10	.....	.....	7 0 0	6,174 15 1
34,944 10 3	.....	4,728 11 11	15,138 6 2	3,783 1 10	3,010 11 1	1,20,131 12 10
.....	.....	.....	.....	.....	.....	.....
2,575 2 9	.....	202 12 11	1,006 9 11	584 13 1	74 7 6	6,099 15 7
4,396 14 10	.....	2,056 8 11	1,512 11 5	2,447 1 6	2,933 7 6	29,793 9 0
6,972 1 7	.....	2,259 5 10	2,519 5 4	3,031 14 7	3,007 15 0	35,893 8 7
4,67,979 3 2	2,370 3 7	59,157 13 4	2,62,164 4 2	1,33,632 15 5	8,022 12 10	16,26,121 0 5
.....	.....	.....	.....	.....	.....	26,025 6 10
22,028 4 5	.....	15,194 11 1	18,751 3 0	14,214 8 3	8,590 0 0	1,18,170 11 5
33,182 2 5	.....	13,263 4 1	21,901 12 9	18,937 12 3	20,439 4 6	1,72,369 15 3
6,808 9 10	.....	4,928 10 4	66,05 0 6	4,553 10 3	5,299 9 8	46,800 1 5
20,926 2 0	.....	8,179 8 11	11,192 6 7	10,023 12 5	10,316 13 8	96,918 7 6
148 10 9	.....	2 11 0	.....	.....	6 9 0	166 11 8
.....	.....	.....	.....	.....	.....	.....
83,093 13 5	.....	46,568 13 5	58,450 6 10	47,884 11 2	44,682 4 10	4,60,451 6 1
.....	.....	.....	.....	.....	.....	3,068 10 10
3,465 11 11	.....	2,657 2 6	1,824 13 5	2,524 0 0	1,763 1 4	17,782 15 9
8,188 6 0	.....	4,698 6 7	4,910 11 11	5,074 2 11	3,896 8 6	41,126 3 9
901 11 10	.....	1,097 1 8	781 0 0	765 8 6	650 14 7	7,044 7 5
182 4 2	.....	.....	225 0 0	150 0 0	.....	782 4 2
.....	.....	.....	.....	.....	.....	.....
12,738 1 11	.....	8,452 10 9	7,741 9 7	8,513 11 5	6,310 8 5	69,804 9 11
334 8 4	.....	183 15 7	223 6 8	212 13 5	229 5 5	1,817 14 2
129 5 0	.....	410 12 5	458 4 2	419 14 6	251 13 8	2,547 14 1
.....	.....	294 0 0	.....	300 0 0	.....	1,452 0 0
.....	.....	.....	.....	.....	.....	.....
852 1 0	.....	1,622 13 6	718 1 6	1,348 8 0	1,183 0 0	9,115 1 0
134 4 9	.....	174 0 1	237 9 9	202 15 9	418 4 2	4,916 2 9
.....	.....	.....	.....	.....	.....	.....
1,450 3 1	.....	2,685 9 7	1,637 6 1	2,484 3 8	2,082 7 3	19,849 0 0
7,282 2 5	.....	57,707 1 9	67,829 6 6	58,882 10 3	53,075 4 6	3,50,105 0 0
5,65,261 5 7	2,370 3 7	1,16,864 15 1	3,29,993 10 8	1,92,515 9 8	61,098 1 4	21,76,226 0 5
+4,70,231 0 0	+236 0 0	—*39,196 0 0*	+46,462 0 0	+18,030 0 0	+2,022 0 0	+7,08,337 0 0

FORM No. 24.—*Summary of Revenue and Expenditure of the different divisions for the forest year 1919-1920*—contd.

Budget Head.	Direction.	Kárachi Division.	Hyderabad Division.	Lárkána Division.	Shikarpur Division.	Sukkur Division.	Thar and Párkar Division.	Total for the forest year 1919-20.
SIND CIRCLE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a.
REVENUE.								
I.—Timber and other produce removed from the forests by Government Agency—								
a. Timber	.....	52 0 0	15 0 0	14 0 0	467 9 7	10,433 4 0	.....	10,981 13 7
b. Firewood and charcoal	.....	24,413 6 1	17,881 0 3	1,460 11 2	237 0 0	2,034 14 11	.....	46,077 0 5
c. Bamboos	.....	.....	.....	.....	.....	0 4 0	.....	0 4 0
d. Sandalwood	.....	.....	.....	.....	.....	.. ..	.....	.....
e. Grass and other minor produce	.....	1,678 11 0	371 2 0	.....	.....	173 4 9	.....	2,223 1 9
Total, I ...	.....	26,144 1 1	18,267 2 3	1,474 11 2	754 9 7	12,641 11 8	.....	59,282 3 9
II.—Timber and other produce removed from the forests by consumers or purchasers—								
a. Timber...	.....	19,654 6 0	44,999 15 2	12,837 6 0	14,611 6 7	35,164 2 5	191 11 0	1,27,458 15 2
b. Firewood and charcoal.	.....	68,339 8 4	91,842 14 11	48,987 14 3	68,531 8 0	1,45,785 14 2	26 5 0	4,23,514 0 8
c. Bamboos	.....	.....	.....	.....	.....	.....	15 0 0	15 0 0
d. Grazing and fodder grass	.....	6,802 12 6	9,033 14 6	5,914 12 0	4,865 1 6	9,078 8 6	756 0 0	36,501 1 0
e. Other minor produce .	.....	5,891 0 0	31,600 14 3	2,753 13 0	1,729 6 2	3,253 3 9	2,373 12 0	47,602 1 2
f. Other items ...	.....	.....	.....	.....	.....	.....	.....	.....
g. Commutation fees ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, II ...	.....	1,00,687 10 10	1,77,527 10 10	70,493 13 3	89,737 6 3	1,93,281 12 10	3,362 12 0	6,35,091 2 0
III.—Drift and waif wood and confiscated forest produce	.....	340 0 0	25 4 0	29 12 6	286 15 6	100 7 0	.....	782 7 6
Total, III ...	.....	340 0 0	25 4 0	29 12 6	286 15 6	100 7 0	.....	782 7 0
IV.—Revenue from forests not managed by Government—								
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, IV ...	.....	.....	.....	.....	.....	.....	.....	.....
V.—Miscellaneous—								
a. Fines and forfeitures .	.....	433 0 0	625 0 0	1,935 0 0	1,775 1 0	1,697 2 8	.....	6,465 3 8
b. Refunds	30 0 0	.....	.....	324 0 0	.....	.....	.....	351 0 0
c. Other sources	43 10 0	5,266 9 3	6,257 11 5	8,018 11 10	6,435 13 4	9,210 8 10	208 8 0	35,441 8 8
Total, V ...	73 10 0	5,699 9 3	6,882 11 5	10,274 11 10	8,210 14 4	10,907 11 6	208 8 0	42,257 12 4
Grand Total, Revenue ...	73 10 0	1,32,871 5 2	2,02,702 12 6	82,273 0 9	98,989 13 8	2,16,931 11 0	3,571 4 0	7,37,413 0 1
EXPENDITURE.								
A.—CONSERVANCY AND WORKS.								
I.—Timber and other produce removed from the forests by Government Agency—								
a. Timber	.....	34 12 11	.....	.....	123 13 7	847 4 0	.....	1,005 14 6
b. Firewood and charcoal	.....	8,193 7 8	7,925 10 0	1,317 3 0	99 8 0	2,106 11 2	.....	19,642 7 10
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandalwood	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	345 0 8	.....	.....	.....	.....	.....	345 0 8
Total, A-I ...	.....	8,573 5 3	7,925 10 0	1,317 3 0	223 5 7	2,953 15 2	.....	20,993 7 0
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	140 15 0	32 1 0	2 8 0	4 8 0	10 12 0	.....	190 12 0
Total, A-II ...	.....	140 15 0	32 1 0	2 8 0	4 8 0	10 12 0	.....	190 12 0
III.—Drift and waif wood and confiscated forest produce	.....	28 0 0	.....	.....	.....	0 6 0	.....	28 6 0
Total, A-III ...	.....	28 0 0	.....	.....	.....	0 6 0	.....	28 6 0
IV.—Revenue from forests not managed by Government—								
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, A-IV ...	.....	.....	.....	.....	.....	.....	.....	.....

FORM No. 24.—*Summary of Revenue and Expenditure of the different divisions for the forest year 1919-1920*—concld.

Budget Head.	Direction.	Karáchi Division.	Hyderabad Division.	Lárkána Division.	Shikarpur Division.	Sukkur Division.	Thar and Párkar Division.	Total for the forest year 1919-20.
EXPENDITURE—*contd.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—*contd.*								
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....	.....	.....	.....	.....	.....
Total, A-V ...	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live Stock, Stores, Tools and Plant—								
a. Purchase of cattle ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle	.....	5 0 0	.....	40 8 0	.....	413 14 4	.....	459 6 4
c. Purchase of stores, tools and plant ...	350 0 0	368 0 0	299 11 0	191 9 0	386 5 0	326 4 0	.....	1,919 13 0
Total, A-VI ...	350 0 0	371 0 0	299 11 0	232 1 0	386 5 0	740 2 4	.....	2,379 3 4
VII.—Communications and Buildings—								
a. Roads and bridges ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Buildings	.....	1,399 3 5	1,323 0 7	542 8 5	607 6 0	931 14 5	.....	4,804 0 10
c. Other works	.....	3,226 13 2	813 13 8	882 4 11	936 12 9	213 3 11	.....	6,073 0 5
Total, A-VII ...	.....	4,626 0 7	2,136 14 3	1,424 13 4	1,544 2 9	1,145 2 4	.....	10,877 1 3
VIII.—Organization, improvement and Extension of forest—								
a. Demarcation	.....	.....	.....	.....	.....	.....	.....	.....
b. Cost of forest settlements and compensation for land and rights	.....	.....	54 10 0	.....	.....	.....	.....	54 10 0
c. Surveys	.....	.....	.....	.....	.....	.....	.....	.....
d. Working Plans ...	.....	68 7 9	60 0 0	695 14 0	607 5 10	485 5 11	.....	2,218 1 6
e. Sowing and planting.	.....	3,988 9 10	6,459 9 9	413 1 0	573 14 6	2,037 10 10	.....	13,472 13 11
f. Protection from fire...	.....	1,249 12 7	100 0 0	102 0 0	275 0 0	641 6 0	.....	2,368 2 7
g. Other works	.....	.....	.....	604 4 7	162 0 0	10 0 0	.....	776 4 7
Total, A-VIII ...	.....	5,306 14 2	6,674 3 9	1,815 3 7	1,918 4 4	3,175 6 9	.....	18,890 0 7
IX.—Miscellaneous—								
a. Law charges	.....	250 0 0	.....	.....	.....	.....	.....	250 0 0
b. Grain compensation...	.....	13 15 0	152 2 11	154 1 1	133 6 3	300 6 6	267 0 5	1,021 0 2
c. Other charges... ...	5 2 0	1,209 6 0	1,321 2 0	740 14 3	657 8 6	1,308 3 4	.....	5,242 4 6
Total, A-IX ...	5 2 0	1,473 5 0	1,473 4 11	894 15 9	790 14 9	1,608 9 10	267 0 5	6,513 4 8
TOTAL, A.—CONSERVANCY AND WORKS	355 2 0	20,519 8 0	18,541 12 11	5,686 12 8	4,867 8 5	9,634 6 5	267 0 5	59,872 2 10
B.—ESTABLISHMENTS.								
I.—Salaries.								
a. Conservators	.....	.....	.....	.....	.....	.....	.....	.....
b. Superior Officers ...	25,109 10 11	570 11 0	6,600 0 0	9,669 7 11	5,466 3 3	7,453 2 9	.....	54,869 3 10
c. Subordinate Forest and Depôt Establishments	.....	17,042 11 3	14,290 8 3	10,959 10 2	8,625 3 4	16,452 9 5	1,602 2 1	68,972 12 6
d. Office Establishments.	5,736 7 11	4,607 6 6	4,759 3 3	3,899 3 8	3,369 15 2	4,682 14 9	.....	27,115 3 1
e. Deputation and Special Allowances	3,448 3 11	8,577 1 9	5,922 3 3	5,008 9 0	4,868 11 9	9,008 15 2	.....	36,833 12 10
f. Grain compensation .	.....	.....	.....	.....	.....	.....	.....	.....
Total, B-I ...	34,354 6 9	30,797 14 6	31,571 14 9	29,536 14 9	22,330 1 6	37,597 9 11	1,602 2 1	1,87,791 0 3
II.—Travelling Allowances—								
a. Conservators	.....	.....	.....	.....	.....	.....	.....	.....
b. Superior Officers ...	2,661 3 8	208 1 9	1,250 14 6	1,351 4 8	1,200 0 0	1,797 10 1	.....	8,475 2 8
c. Subordinate Forest and Depôt Establishments.	.....	3,680 12 0	2,978 6 5	2,103 11 2	1,529 3 4	3,006 8 9	.....	13,298 9 8
d. Office Establishments .	656 8 8	760 10 5	862 2 4	923 12 11	558 1 7	686 4 10	.....	4,447 8 9
e. Forest School (D.D.) .	.....	133 15 2	140 4 7	.....	.....	.....	.....	274 3 9
f. Plague allowance ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, B-II ...	3,317 12 4	4,783 7 4	5,237 11 10	4,378 12 9	3,287 4 11	5,490 7 8	.....	26,495 8 10
III.—Contingencies—								
a. Stationery	11 14 6	158 1 0	215 0 11	138 13 0	103 3 0	214 8 6	.....	841 8 11
b. Carriage of tents and records	544 5 4	291 10 11	250 6 9	250 15 7	198 14 6	265 8 6	.....	1,801 13 7
c. Rents, Rates and Taxes	1,670 13 9	666 0 0	469 0 0	717 4 0	651 15 9	133 8 0	.....	4,308 8 9
d. Pay of Police guards.	.....	.....	.....	.....	.....	.....	.....	.....
e Official postage ...	316 6 6	596 9 0	474 5 6	860 14 6	443 8 0	787 4 6	.....	3,479 0 0
f. Sundries	668 7 9	765 8 0	564 11 9	612 0 9	479 6 7	575 8 6	.....	3,665 11 4
Payments to officers of other provinces	.....	.....	.....	.....	.....	.....	.....	.....
Total, B-III ...	3,211 15 10	2,477 12 11	1,973 8 11	2,579 15 10	1,876 15 1	1,976 6 0	.....	14,096 10 7
TOTAL, B.—ESTABLISHMENTS	40,884 2 11	38,059 2 9	38,783 3 6	36,495 11 4	27,494 5 6	45,064 7 7	1,602 2 1	2,28,383 3 6
GRAND TOTAL OF EXPENDITURE...	41,239 4 11	58,578 10 9	57,325 0 5	42,182 8 0	32,361 13 11	54,698 14 0	1,869 2 6	2,88,255 6 6
Surplus or deficit ..	—41,166 0 0	+74,293 0 0	+1,45,378 0 0	+40,091 0 0	+66,623 0 0	+1,62,233 0 0	+1,702 0 0	+4,49,153 0 0

FORM NO. 24.—*continued.*

ABSTRACT.

	Revenue.	Expenditure. A.	Expenditure. B.	Total.	Surplus.	Deficit.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. General Direction including Famine Fodder and Forest College.	1,41,125 0 3	4,76,114 6 8	62,006 14 9	5,38,121 5 5	.....	3,96,996 5 2
2. Northern Circle ...	26,64,717 4 0	4,53,685 12 5	5,49,491 2 1	10,02,176 14 6	16,62,540 5 6	.....
3. Central Do. ...	10,00,006 4 1	2,73,653 11 3	5,47,622 15 11	8,21,276 11 2	1,78,729 8 11	.....
4. Southern Do. ...	28,84,563 3 8	16,26,121 0 5	5,50,105 0 0	21,76,226 0 5	7,08,337 3 3	.....
5. Sind Do. ...	7,37,413 9 1	59,872 2 10	2,28,383 3 8	2,88,255 6 6	4,49,158 2 7	.....
6. Utilization ...	.....	470 0 10	9,078 10 7	9,548 11 5	.....	9,548 11 5
For the Presidency ...	74,27,825 5 1	28,88,917 2 5	19,46,687 15 0	48,35,605 1 5	29,98,765 4 3	4,06,545 0 7
Net after Excluding Famine Fodder.	71,06,036 0 0	22,67,988 0 0	19,45,422 0 0	42,13,410 0 0	28,92,626 0 0	72,593 0 0
					Net surplus Rs.	28,20,123 0

FORM No. 24.

UTILIZATION CIRCLE.

Summary of Revenue and Expenditure of the different Divisions for the Forest year 1919-20.

EXPENDITURE.

	Total for 1919-20. Rs. a. p.
A Conservancy and Works—	
VI.—Live-Stock, stores, tools and plant—	
a. Purchase of cattle	.....
b. Feed and keep of cattle	.....
c. Purchase of stores, tools and plant	285 3 10
Total A-VI ...	285 3 10
IX —Miscellaneous—	
a. Law charges	.....
b. Grain Compensation	.....
c. Other charges	184 13 0
Total A-IX ...	184 13 0
Total A—Conservancy and Works ...	470 0 10
B.—Establishments—	
I.—Salaries—	
a. Conservators	7,000 0 0
b. Superior Officers	.....
c. Subordinate forest and depôt Establishments	.....
d. Office establishments	258 9 9
e. Deputation and Special Allowances	120 7 11
f. Grain Compensation Allowance...	.....
Total B-I ...	7,379 1 8
II.—Travelling Allowance—	
a. Conservators	1,286 3 3
b. Superior Officers	.....
c. Subordinate forest and depôt establishments	.....
d. Office establishments	357 12 8
e. Forest School (Dehra dun)	.....
f. Plague Allowance	.....
Total B-II ...	1,643 15 11
III.—Contingencies—	
a. Stationery	4 12 0
b. Carriage of tents and records	.....
c. Rents, rates, and taxes	.....
d. Pay of Police guards	.....
e. Official postage	50 0 0
f. Sundries	0 13 0
Payments to officers of other Provinces	.....
Total B-III ...	55 9 0
Total B.—Establishments ...	9,078 10 7
Grand Total of Expenditure ...	9,548 11 5

FORM No. 24.—*Consolidated summary of the Chief Direction including Famine Fodder and Bombay Forest College for the Forest year 1919-20.*

Budget Head.	Direction.	Famine Fodder Division.	Bombay Forest College Division.	Total for 1919-20.
REVENUE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I. Timber and other produce removed from the forests by Government Agency—				
1. Grass and other minor produce ...	.....	1,41,099 4 5	.....	1,41,099 4 5
Total I ...	.....	1,41,099 4 5	.....	1,41,099 4 5
V. Miscellaneous—				
1. Other sources	25 11 10	.....	.....	25 11 10
Total V ...	25 11 10	.....	.....	25 11 10
Grand Total Revenue ...	25 11 10	1,41,099 4 5	.....	1,41,125 0 3
EXPENDITURE.				
A—Conservancy and Works.				
1. Timber and other produce removed from the forests by Government Agency—				
1. Grass and other minor produce ..	.....	4,75,140 13 10	.....	4,75,140 13 10
Total A—I ...	.....	4,75,140 13 10	.....	4,75,140 13 10
VI. Live-stock, stores, tools and plant—				
1. Purchase of stores, tools and plant	206 12 0	206 12 0	687 10 8	894 6 8
Total A—VI ...	206 12 0	206 12 0	687 10 8	894 6 8
IX. Miscellaneous—				
1. Other charges	79 2 2	.....	.....	79 2 2
Total A—IX ...	79 2 2	.....	.....	79 2 2
Total A—Conservancy and Works ...	285 14 2	4,75,140 13 10	687 10 8	4,76,114 6 8
B—Establishments.				
I. Salaries—				
1. Conservators	30,477 10 9	.....	.....	30,477 10 9
2. Superior Officers	4,099 5 4	.....	1,400 0 0	5,499 5 4
3. Office establishments ...	6,779 11 5	.....	135 11 5	6,915 6 10
4. Deputation and Special Allowances.	4,004 8 8	.....	53 7 0	4,057 15 8
Total B—I ...	45,361 4 2	.....	1,589 2 5	46,950 6 7
II. Travelling Allowances—				
1. Conservators	5,106 2 4	.....	.....	5,106 2 4
2. Superior Officers	152 0 0	.....	806 0 8	958 0 8
3. Subordinate forest and depôt establishments	.....	.....	2 0 6	2 0 6
4. Office establishments	3,045 8 5	.....	.....	3,045 8 5
Total B—II ...	8,303 10 9	.....	808 1 2	9,111 11 11
III. Contingencies—				
1. Stationery	37 12 3	.....	.....	37 12 3
2. Carriage of tents and records ...	934 1 0	.....	.....	934 1 0
3. Rents, rates and taxes	2,856 0 0	.....	30 0 0	2,886 0 0
4. Official postage	618 5 6	.....	.....	618 5 6
5. Sundries	1,218 6 9	.....	250 2 9	1,468 9 6
Total B—III ...	5,664 9 6	.....	280 2 9	5,944 12 3
Total B—Establishments ...	59,329 8 5	.....	2,677 6 4	62,006 14 9
Grand Total of Expenditure ...	59,615 6 7	4,75,140 13 10	3,365 1 0	5,38,121 5 5

FORM No. 26.—*Revenue received and outstandings on account of revenue during 1919-1920.*

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction ...	Various sources ...	.....	579 0 0	579 0 0	579 0 0	.....	
Panch Mahals.	Timber and other produce.	1,57,969 6 0	2,01,905 5 5	3,59,874 11 5	3,57,129 13 5	2,744 14 0	
Surat ...	Do. ...	6,677 12 0	3,51,583 3 3	3,58,260 15 3	3,22,871 8 3	35,389 7 0	
North Thána.	Do. ...	*17,592 0 0	9,09,782 12 0	9,27,374 12 0	9,09,782 12 0 *17,592 0 0	.....	*The Bhatane coupe contract was cancelled and the amount was written off, vide Government Order No. 793, dated 8th March 1921, R. D.
West Thána ...	Do. ..	12,453 8 0	3,57,548 8 2	3,70,002 0 2	3,70,002 0 2	.....	
East Thána ...	Do. ...	41,042 5 0	3,33,240 15 7	3,74,283 4 7	3,41,714 7 7	32,568 13 0	
West Násik ...	Do. ...	21,353 0 0	1,86,495 14 9	2,07,848 14 9	1,68,547 14 9	39,301 0 0	
North Násik ...	Do. ...	4,995 0 0	42,132 14 6	47,127 14 6	42,783 14 6	4,344 0 0	
East Násik ...	Do. ...	.....	43,012 12 11	43,012 12 11	43,012 12 11	.....	
Famine Fodder	Do. ...	.....	1,08,293 0 5	1,08,293 0 5	1,08,293 0 5	.....	
	Total, Northern Circle.	2,62,082 15 0	25,34,574 7 0	27,96,657 6 0	26,82,309 4 0	1,14,348 2 0	
CENTRAL CIRCLE.							
Direction ...	Various sources ...	.....	733 2 8	733 2 8	733 2 8	.....	
East Khándesh.	Timber and other forest produce.	.....	2,05,750 11 7	2,05,750 11 7	2,05,750 11 7	.....	
West Khándesh.	Do. ...	978 12 0	1,90,639 11 9	1,91,618 7 9	1,90,678 7 9	940 0 0	
North Khándesh.	Do. ..	12,059 8 0	1,25,222 8 0	1,37,282 0 0	1,35,668 0 0	1,614 0 0	
Poona ...	Do. ...	75 0 0	1,52,653 11 2	1,52,728 11 2	1,52,728 11 2	.....	
Sátára ...	Do. ...	13,750 0 0	60,958 5 8	74,708 5 8	65,345 5 8	9,363 0 0	
Kolába ...	Do. ...	675 0 0	2,45,701 12 0	2,46,376 12 0	2,44,317 12 0	2,059 0 0	
Working Plans.	Do.	.....	36 1 3	36 1 3	36 1 3	.....	
Famine Fodder	Do. ...	.....	4,748 0 0	4,748 0 0	4,748 0 0	.....	
	Total, Central Circle ..	27,538 4 0	9,86,444 0 1	10,13,982 4 1	10,00,006 4 1	13,976 0 0	
SOUTHERN CIRCLE.							
Kánara, Northern.	Timber and other forest produce.	5,25,027 9 11	11,60,830 14 11	16,85,858 8 10	10,38,099 3 1	6,47,759 5 9	Irrecoverable revenue written off :—
Kánara, Eastern.	Do. ..	2,19,535 10 0	6,54,087 10 10	8,73,623 4 10	6,09,986 12 4	2,63,636 8 6	Rs. a. p.
Kánara, Central.	Do. ...	84,136 3 10	1,61,577 11 3	2,46,013 15 1	2,10,545 5 10	35,468 9 3	5 items 2 710 4 6
Kánara, Southern.	Do. ...	4,792 11 2	90,264 10 10	95,057 6 0	77,668 10 0	17,388 12 0	
Kánara, Western.	Do. ...	1,09,785 7 9	3,10,407 3 4	4,20,192 11 1	3,76,455 15 8	43,736 11 5	
Belgaum ...	Do. ...	1,04,978 14 5	6,01,698 6 6	7,06,677 4 11	5,06,762 4 8	1,99,915 0 3	
Dhárwár-Bijápur.	Do. ...	24,612 8 0	55,970 1 2	80,582 9 2	63,119 15 5	17,462 9 9	
Direction ...	Various sources ...	.....	1,925 0 8	1,925 0 8	1,925 0 8	.....	
Working Plans	Do. ...	.....	.....	.....	.....	.....	
	Total, Southern Circle...	10,73,169 1 1	30,36,761 11 6	41,09,930 12 7	28,84,563 3 8	12,25,367 8 11	
SIND CIRCLE.							
Direction ...	Various sources	.....	73 10 0	73 10 0	73 10 0	.....	
Sukkur ...	Timber and other forest produce.	20,287 11 11	1,96,969 3 9	2,17,256 15 8	2,16,931 11 0	325 4 8	
Shikarpur ...	Do. ..	18,601 8 0	83,429 13 8	1,02,031 5 8	98,989 13 8	3,041 8 0	
Lárkána ...	Do. ...	.....	82,970 0 9	82,970 0 9	82,273 0 9	697 0 0	
Hyderabad ...	Do. ...	62,248 12 3	1,77,836 2 5	2,40,084 14 8	2,02,702 12 6	37,382 2 2	
Karachi ...	Do. ...	26,941 4 9	1,32,054 9 8	1,58,995 14 5	1,32,871 5 2	26,124 9 3	
Thar and Párkar.	Do. ...	.....	3,571 4 0	3,571 4 0	3,571 4 0	.....	
	Total, Sind Circle ...	1,28,079 4 11	6,76,904 12 3	8,04,984 1 2	7,37,413 9 1	67,570 8 1	
	GRAND TOTAL PRESIDENCY.	14,90,869 9 0	72,34,684 14 10	87,25,554 7 10	73,04,292 4 10	14,21,262 3 0	

FORM No. 27.—*Outstandings and Liabilities on account of Contractors and Disbursers for the forest year 1919-1920.*

Division.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
1	2	3	4	5	6	7	8	9	10
Chief Direction (including Forest College and Controller, Famine Fodder.)	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Disbursers.									
Bombay Forest College	...	.....	.....	.....	376 3 5	376 3 5	376 3 5	...	
Total, Disbursers ...	...	.....	.....	.....	376 3 5	376 3 5	376 3 5	...	
TOTAL BOMBAY FOREST COLLEGE.	..	.....	.....	.....	376 3 5	376 3 5	376 3 5	...	
NORTHERN CIRCLE.									
Contractors.									
Direction N. C. ...	...	.....	.....	.....	1,800 0 0	1,800 0 0	1,800 0 0	...	
Panch Mahals ...	...	.....	.....	.....	.....	.....	.....	...	
West Thána ...	...	.....	.....	.....	.....	.....	.....	...	
North Thána ...	...	.....	.....	.....	.....	.....	.....	...	
East Thána ...	...	26,750 0 0	26,750 0 0	...	26,750 0 0	26,750 0 0	.....	...	
Surat ...	...	7,558 14 0	7,558 14 0	6,170 5 0	18,000 0 0	24,170 5 0	16,611 7 0	...	
North Násik ...	...	.....	.....	.....	.....	.....	.....	...	
West Násik ...	...	1,355 0 0	1,355 0 0	.....	3,500 0 0	3,500 0 0	2,145 0 0	...	
East Násik ...	...	.....	.....	.....	.....	.....	.....	...	
Direction Famine Fodder.	...	.....	.....	.....	.....	.....	.....	...	
Direction Timber Operations.	...	.....	.....	.....	.....	.....	.....	...	
Total, Contractors ...	...	35,663 14 0	35,663 14 0	6,170 5 0	50,050 0 0	56,220 5 0	20,556 7 0	...	
Disbursers.									
Direction N. C. ..	...	.....	.....	.....	.....	.....	.....	...	
Panch Mahals ...	...	47,481 14 5	47,481 14 5	413 0 11	47,723 0 0	48,136 0 11	654 2 6	...	
West Thána ...	...	89 263 6 11	89,263 6 11	2,147 9 0	91,631 0 0	93,778 9 0	4,515 2 1	...	
North Thána ...	...	1,41,823 12 2	1,41,823 12 2	14,000 9 3	1,32,562 3 9	1,46,562 13 0	4,739 0 10	...	
East Thána ...	...	87,528 10 10	87,528 10 10	2,634 12 2	89,478 11 10	92,113 8 0	4,584 13 2	...	
Surat ...	...	1,40,358 9 6	1,40,358 9 6	7,495 13 7	1,44,340 5 0	1,51,836 2 7	11,477 9 1	...	
North Násik ...	...	28,349 6 7	28,349 6 7	453 7 7	28,502 4 0	28,955 11 7	606 5 0	...	
West Násik ...	...	69,438 2 1	69,438 2 1	3,929 2 7	72,393 7 10	76,322 10 5	6,884 8 4	...	
East Násik ...	...	22,002 3 2	22,002 3 2	1,045 15 11	21,230 0 0	22,275 15 11	273 12 9	...	
Direction Famine Fodder, N. C.	...	4,814 3 4	4,814 3 4	2,474 13 8	2,339 5 8	4,814 3 4	.....	...	
Direction Timber Operations.	...	5,500 0 0	5,500 0 0	5,500 0 0	... ..	5,500 0 0	... ..	...	
Total, Disbursers ...	...	6,36,560 5 0	6,36,560 5 0	40,095 4 8	6,30,200 6 1	6,70,295 10 9	33,735 5 9	...	
TOTAL, N. C. ..	...	6,72,224 3 0	6,72,224 3 0	46,265 9 8	6,80,250 6 1	7,26,515 15 9	54,291 12 9	...	
CENTRAL CIRCLE.									
Contractors.									
West Khándesh Famine Fodder.	...	34,344 0 0	34,344 0 0	.....	38,000 0 0	38,000 0 0	3,656 0 0	...	
Total, Contractors ...	...	34,344 0 0	34,344 0 0	.....	38,000 0 0	38,000 0 0	3,656 0 0	...	
Disbursers.									
East Khándesh ...	...	75,714 14 1	75,714 14 1	1,175 7 4	75,770 4 4	76,945 11 8	1,230 13 7	...	
West Khándesh ..	...	78,001 3 6	76,001 3 6	1,668 8 8	78,650 7 1	80,318 15 9	4,317 12 3	...	
North Khándesh ..	...	90,196 7 9	90,196 7 9	4,585 0 3	91,957 9 3	96,542 9 6	6,346 1 9	...	
Kolába ..	...	87,044 12 4	87,044 12 4	1,393 0 9	87,065 9 0	88,458 9 9	1,413 13 5	...	
Poona ...	...	99,586 7 9	99,586 7 9	1,409 15 11	99,574 14 7	1,00,984 14 6	1,398 6 9	...	
Sátára ..	...	66,531 12 11	66,331 12 11	589 10 7	67,184 10 3	67,774 4 10	1,442 7 11	...	
Working Plans ..	...	2,827 0 6	2,827 0 6	119 3 3	2,750 13 8	2,870 0 11	43 0 5	...	
West Khándesh Fodder Famine.	...	21,344 9 7	21,344 9 7	72 5 6	21,303 13 6	21,376 3 0	31 9 5	...	
Sátára Famine Fodder	...	38 10 0	38 10 0	38 10 0	.....	38 10 0	.....	...	
Poona Famine Fodder	...	626 14 4	626 14 4	626 14 4	.....	626 14 4	.....	...	
Total, Disbursers ...	...	3 19,712 12 9	5,19,712 12 9	11,678 12 7	5,24,258 1 8	5,35,936 14 3	16,224 1 6	...	
TOTAL, C. C.	...	5,54,056 1 9	5,54,056 12 9	11,678 12 7	5,62,258 1 8	5,73,936 14 3	19,880 1 6	...	

FORM No. 27.—*Outstandings and Liabilities on account of Contractors and Disbursers for the forest year 1919-1920*—concld.

Division.	Department Debtor.			Department Creditor.			Balance Due		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
1	2	3	4	5	6	7	8	9	10
SOUTHERN CIRCLE.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Contractors.									
Belgaum	...	1,22,597 11 0	1,22,597 11 0	78,386 8 11	1,78,220 0 0	2,56,606 8 11	1,34,008 13 11	...	
Kánara, N. D. ...	...	1,33,724 14 2	1,33,724 14 2	51,306 11 10	1,75,056 0 3	2,26,362 12 1	92,637 13 11	...	
Kánara, E. D. ...	...	85,208 6 7	85,208 6 7	77,123 9 11	81,763 7 6	1,58,887 1 5	73,678 10 10	...	
Kánara, S. D. ...	...	6,294 2 1	6,294 2 1	12,753 9 10	25,110 0 0	37,863 9 10	31,569 7 9	...	
Kánara, C. D. ...	...	50,391 15 10	50,391 15 10	60,953 14 10	46,072 0 0	1,07,025 14 10	56,633 15 0	...	
Kánara, W. D. ...	...	95,209 3 10	95,209 3 10	1,22,221 8 7	93,630 4 0	2,15,851 12 7	1,20,642 8 9	...	
Total, Contractors ...	...	4,93,426 5 6	4,93,426 5 6	4,02,745 15 11	5,99,851 11 9	10,02,597 11 8	5,09,171 6 2	...	
Disbursers.									
Direction	...	81 2 3	81 2 3	729 11 3	.....	729 11 3	648 9 0	...	
Belgaum	...	2,34,476 7 1	2,34,476 7 1	59,033 6 11	1,96,960 0 0	2,55,993 6 11	21,516 15 10	...	
Kánara, N. D. ..	...	3,00,451 8 8	3,00,451 8 8	38,012 15 2	3,64,701 12 3	4,02,714 11 5	1,02,268 2 9	...	
Kánara, E. D. ...	...	2,24,250 9 5	2,24,250 9 5	33,020 11 2	2,05,913 5 4	2,38,934 0 6	14,683 7 1	...	
Kánara, S. D. ...	...	83,823 6 0	83,823 6 0	3,426 15 7	89,901 12 3	93,328 11 10	9,505 5 10	...	
Kánara, C. D. ...	...	83,248 15 5	83,248 15 5	21,351 8 6	83,036 12 2	1,04,388 4 8	21,139 5 3	...	
Kánara, W. D. ...	...	1,21,720 13 9	1,21,720 13 9	18,669 0 5	1,23,315 3 6	1,41,984 3 11	20,263 6 2	...	
Dhárwár-Bijápur ...	...	40,967 11 6	40,967 11 6	461 1 5	41,271 7 8	41,732 9 1	764 13 7	...	
Total, Disbursers ...	...	10,89,020 10 1	10,89,020 10 1	1,74,705 6 5	11,06,100 5 2	12,79,805 11 7	1,90,785 1 6	...	
TOTAL, S. C. ...	...	15,82,446 15 7	15,82,446 15 7	5,77,451 6 4	17,04,952 0 11	22,82,403 7 3	6,99,956 7 8	...	
SIND CIRCLE.									
Contractors.									
Direction (Sind) ...	...	100 0 0	100 0 0	.....	100 0 0	100 0 0	.....	...	
Hyderabad (Sind) ...	...	15 0 0	15 0 0	.....	1,515 0 0	1,515 0 0	1,500 0 0	...	
Lárkána	...	20 0 0	20 0 0	.....	20 0 0	20 0 0	.....	...	
Shikarpur	...	20 0 0	20 0 0	.....	20 0 0	20 0 0	.....	...	
Sukkar	...	20 0 0	20 0 0	.....	20 0 0	20 0 0	.....	...	
Total, Contractors...	...	175 0 0	175 0 0	.....	1,675 0 0	1,675 0 0	1,500 0 0	...	
Disbursers.									
Direction (Sind) ...	...	.....	.....	.....	.....	.....	.....	...	
Karáchi	...	47,808 9 9	47,808 9 9	1,819 2 2	49,828 10 2	51,647 12 4	3,839 2 7	...	
Hyderabad (Sind) ..	...	39,426 6 1	39,426 6 1	2,405 6 1	39,916 12 1	42,322 2 2	2,895 12 1	...	
Lárkána	...	24,168 6 3	24,168 6 3	443 1 3	24,656 8 0	25,099 9 3	931 3 0	...	
Shikarpur ...	...	17,865 13 8	17,865 13 8	235 7 2	18,889 3 2	19,124 10 4	1,258 12 8	...	
Sukkur	...	35,629 10 9	35,269 10 9	1,448 3 6	38,247 7 4	39,695 10 9	4,066 0 0	...	
Thar and Parkar ...	...	.....	.....	.....	.....	.....	.....	...	
Total, Disbursers ...	...	1,64,898 14 6	1,64,898 14 6	6,351 4 1	1,71,538 8 9	1,77,889 12 10	12,990 14 4	...	
Total, Sind Circle ...	...	1,65,073 14 6	1,65,073 14 6	6,351 4 1	1,73,213 8 9	1,79,564 12 10	14,490 14 4	...	
GRAND TOTAL PRESIDENCY.	...	29,73,801 13 10	29,73,801 13 10	6,41,747 0 8	31,21,050 4 10	37,62,797 5 6	7,88,995 7 8	...	

BOMBAY : PRINTED AT THE GOVERNMENT CENTRAL PRESS.

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Administration Reports.

Administration Report of the Forest Circles in the Bombay Presidency, including Sind, for the year 1919-20.

GOVERNMENT OF BOMBAY.

REVENUE DEPARTMENT.

Resolution No. 1607.

Secretariat, Fort, Bombay.

Dated the 14th June 1921.

Read the Administration Report of the Forest Circles in the Bombay Presidency, including Sind, for the year 1919-20, submitted by the Chief Conservator of Forests, Bombay Presidency.

RESOLUTION.—The Forest revenue of the year under report was somewhat less than that of the year before, due to fall in the market for timber, but both revenue and expenditure were nearly double those of ten years ago, and the net profit was 67 per cent. on the expenditure. That the doubled expenditure has produced a doubled income shows that the forests are a property of which the development is exceedingly profitable. At present, though the lines of development are laid down and a good deal has been done, yet the actual accomplishment is small compared with the obvious possibilities. That the continuance of a progressive policy will result in a most important addition to the public revenue appears certain. No other kind of public revenue can be increased without some hardship to tax-payer or the consumer. In the case of forests the only hardship is that which may be caused by the restrictions necessary for conservation. These are in no way increased by the present methods of development, which are chiefly the improvement of communications and the introduction of machinery. On the other hand more attention is now being given to the removal of any restrictions which may not be indispensable. The concessions already made to cultivators in Kanara and Belgaum are an instance of this: and the contemplated appointment of a commission to enquire into forest grievances is proof that this question will receive most careful attention from the new Ministry of Forests.

The Forest Department worked as usual short-handed under inevitably unhealthy conditions. That the results were so satisfactory is greatly to the credit of the Chief Conservator and the Department in general.

By order of the Government of Bombay
(Transferred Departments),

SHAMRAO D. MANKAR,
Under Secretary to Government.

To

*The Commissioner in Sind,
*The Commissioners of Divisions,
*All Collectors, including the Deputy Commissioner, Upper Sind Frontier,

*With copies of the Report.

P.T.O.

SN Rev 265

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*The Director of Agriculture,
The Chief Conservator of Forests, Bombay Presidency,
The Conservators and Deputy Conservator of Forests in charge of Circles,
*The Conservator of Forests, Utilization Circle,
*The Principal, Bombay Forest College, Dharwar,
The Settlement Commissioner and Director of Land Records,
*The Director of Industries,
*The Accountant General,
*The Compiler, General Administration Report,
The Oriental Translator to Government,
*The Public Works Department,
*The Legal Department of the Secretariat (for the Reading Room for the Honourable Members of the Legislative Council),
*The Director of Information,
*The Editors' Tables,
†The Government of India,
†The Under Secretary of State for India.

*With copies of the Report.
†By letter.

No. of 1921.

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